Appendix E

City of San Marcos Climate Action Plan Implementation Cost Analysis

Climate Action Plan Implementation Cost Analysis

A Preliminary Estimate of the City of San Marcos Budget Impact and Staffing Needs to Implement CAP Activities

July 2020

Prepared for the City of San Marcos

Prepared by the Energy Policy Initiatives Center

EPIC
ENERGY POLICY INITIATIVES CENTER
UNIVERSITY OF SAN DIEGO SCHOOL OF LAW

University of San Diego, 5998 Alcalá Park, San Diego, CA 92110 ◆ www.sandiego.edu/epic

The Energy Policy Initiatives Center (EPIC) prepared this report for the City of San Marcos. This report represents EPIC's professional judgment based on the data and information available at the time EPIC prepared this report. EPIC relies on data and information from third parties who provide it with no guarantees such as of completeness, accuracy or timeliness. EPIC makes no representations or warranties, whether expressed or implied, and assumes no legal liability for the use of the information in this report; nor does any party represent that the uses of this information will not infringe upon privately owned rights. Readers of the report are advised that EPIC may periodically update this report or data, information, findings, and opinions and that they assume all liabilities incurred by them, or third parties, as a result of their reliance on the report, data, information, findings and opinions contained in the report.

TABLE OF CONTENTS

1 EXECUTIVE SUMMARY 1
1.1 COST ANALYSIS FRAMEWORK 1
1.2 KEY FINDINGS 2
Incremental, Unfunded Costs to Implement CAP Activities through FY 24–25 would be About $4.2 million 2
Existing Staffing Capacity Should be Sufficient to Implement CAP Measures 3
Three CAP Measures Account for Most Implementation Costs 4
Public Works Would Have the Highest Implementation Costs and Staffing Impacts 4
1.3 NEXT STEPS AND RECOMMENDATIONS 5
2 INTRODUCTION 6
2.1 ORGANIZATION OF REPORT 6
3 CAP IMPLEMENTATION COST ANALYSIS OVERVIEW 7
3.1 PROCESS TO ESTIMATE CAP IMPLEMENTATION COSTS 7
3.1.1 Identify Implementation Actions 8
3.1.2 Establish Preliminary Cost Estimates 9
3.1.3 Quality Assurance and Quality Control (QA/QC) 9
3.2 COSTS EVALUATED 10
3.2.1 Framework for Evaluating CAP Costs 10
3.2.2 Contingency 11
4 RESULTS – CAP IMPLEMENTATION COSTS 12
4.1 TOTAL CAP IMPLEMENTATION COSTS 12
4.2 COSTS BY MEASURE 13
4.3 COSTS BY DEPARTMENT 16
4.3.1 Costs by Division 18
4.4 COSTS BY EXPENDITURE CATEGORY 18
4.4.1 Breakdown by Department and Division 20
4.4.2 Breakdown by Measure 22
4.5 COSTS BY CAP STRATEGY 23
5 RESULTS – STAFFING IMPACTS (FTE) 25
5.1 OVERALL STAFF IMPACTS 25
5.2 STAFFING IMPACT BY DEPARTMENT 26
5.2.1 Staffing Impact by Division 28
5.3 STAFFING IMPACT BY POSITION 28
5.4 STAFFING IMPACT BY MEASURE 29
5.5 STAFFING IMPACT BY CAP STRATEGY 30
6 SUPPORTING EFFORTS 32
6.1 COSTS FOR SUPPORTING EFFORTS 32
6.2 STAFFING IMPACT FOR SUPPORTING EFFORTS 36
7 LIMITATIONS 39
7.1 PRELIMINARY ESTIMATE 39
7.2 CAP TIME HORIZON 39
7.3 COST SAVINGS NOT CONSIDERED 39
7.4 GHG EMISSIONS 39
APPENDIX A FUNDING OPPORTUNITIES 40

1 EXECUTIVE SUMMARY

This report summarizes the findings of the City of San Marcos (San Marcos) Climate Action Plan (CAP) Implementation Cost Analysis conducted by the Energy Policy Initiatives Center (EPIC) at the University of San Diego. The analysis estimates costs and staffing impacts to implement the activities needed to achieve the GHG emission reduction targets as identified in the CAP. The goals of this analysis are to estimate the following over the first five fiscal years of CAP implementation (FY 2021–22 to FY 2024–25):

- Total cost to San Marcos to implement GHG reduction measures included in CAP over the first five fiscal years;
- Full-time equivalent (FTE) staffing impacts to implement CAP measures; and,
- Incremental costs that would not have occurred without CAP adoption.

While the analysis in this report evaluated costs for the first five fiscal years, CAP measures could have associated costs beyond the time frame presented here since the CAP identifies activities to reduce GHG emissions until year 2030. Cost and staffing impact estimates in this report represent those anticipated to be incurred by San Marcos to implement CAP measures, including costs to develop and execute projects and programs, develop and adopt ordinances, and conduct education and outreach activities. Costs associated with CAP coordination and reporting, including costs to assess the performance of CAP measures annually, complete regular GHG inventory updates, coordinate implementation and performance-tracking activities among departments, and prepare CAP updates are also included here.

It should be noted that this Cost Analysis is conducted to present estimated staffing and cost impacts to the City and does not include a Benefit Cost Analysis or present any cost and GHG reductions achieved over time due to implementation of CAP measures. This document also does not serve as a mechanism for funding allocation. All funds needed to implement the CAP will be allocated through the City's regular budgeting process. This report, however, can serve as a resource when allocating future funding. This report also does not include costs and benefits borne by San Marcos residents and businesses.

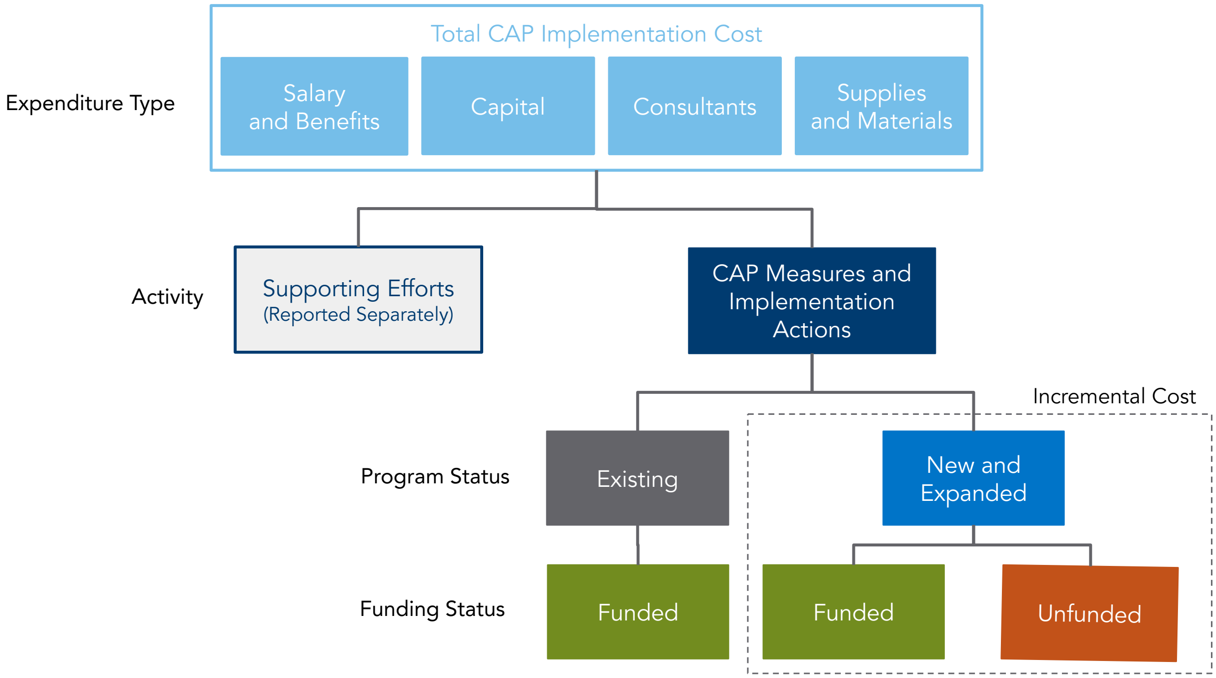
To capture uncertainty of the cost estimates, a 10% contingency is applied to total overall cost estimates, excluding capital costs as regular capital cost estimates include contingencies of 25% or higher.

1.1 Cost Analysis Framework

Total implementation costs comprise several expenditure types: salary and benefits, capital, consultants, and supplies and materials. For this analysis, implementation activities directly related to CAP measures and implementation actions were separated from supporting efforts, which are included in the CAP to support identified Strategies. Since the support efforts do not necessarily directly result in GHG reductions and may not occur, they are separated from other costs and reported separately in this report.

Activities that directly implement CAP measures can be divided into existing and new and expanded programs. Based on the analysis conducted for this report, all existing programs have identified funding status (i.e., funded) but new and expanded programs can have funded or unfunded activities. Costs associated with new and expanded activities represent the incremental costs to implement CAP measures. These represent additional costs to San Marcos that would result from CAP adoption. Figure 1 illustrates this cost analysis framework.

Figure 1 Framework for Evaluating CAP Implementation Costs



1.2 Key Findings

Key findings of the CAP Implementation Cost Analysis are presented below.

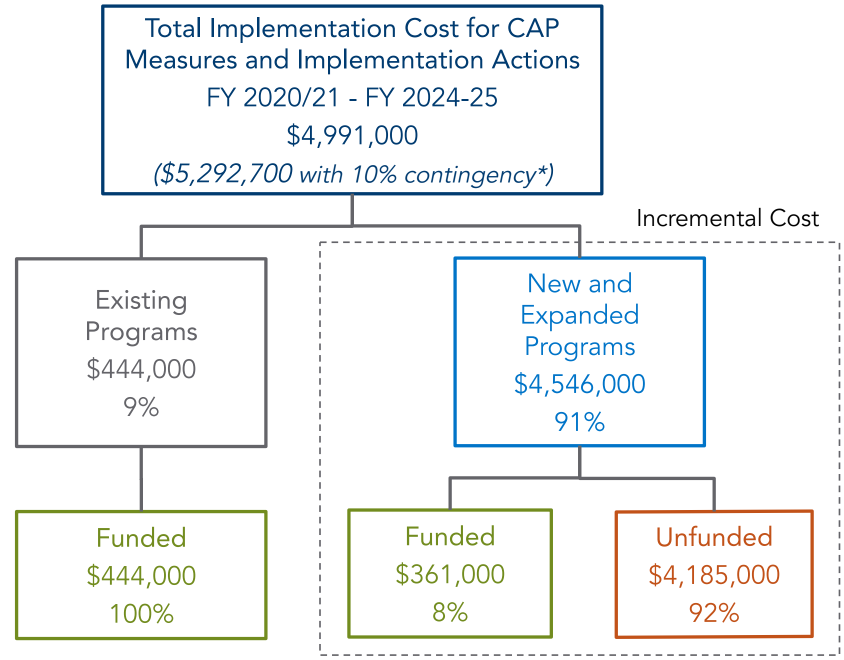
Incremental, Unfunded Costs to Implement CAP Activities through FY 24–25 would be About $4.2 million

The total estimated cost to implement CAP measures over the first five-year period (FY 2020–21 – FY 2024–25)—not including supporting efforts—is about $5 million (Figure 2). Assuming an additional 10% contingency to account for uncertainty, the total would be about $5.3 million.[1] The vast majority of these costs, about $4.5 million (91%), are associated with new and expanded programs and represent incremental costs that would not have occurred without CAP adoption. Of this subset of costs, about $4.2 million, or 92% of new and expanded program costs, are unfunded.

---

[1] The 10% contingency is not added to Capital costs since the estimate already includes 25% or higher contingency.

Figure 2 Total CAP Implementation Costs Summary Diagram (FY21–FY25)[2]



*10% contingency is not added to Capital costs since the estimate already includes 25% or higher contingency.

Existing Staffing Capacity Should be Sufficient to Implement CAP Measures

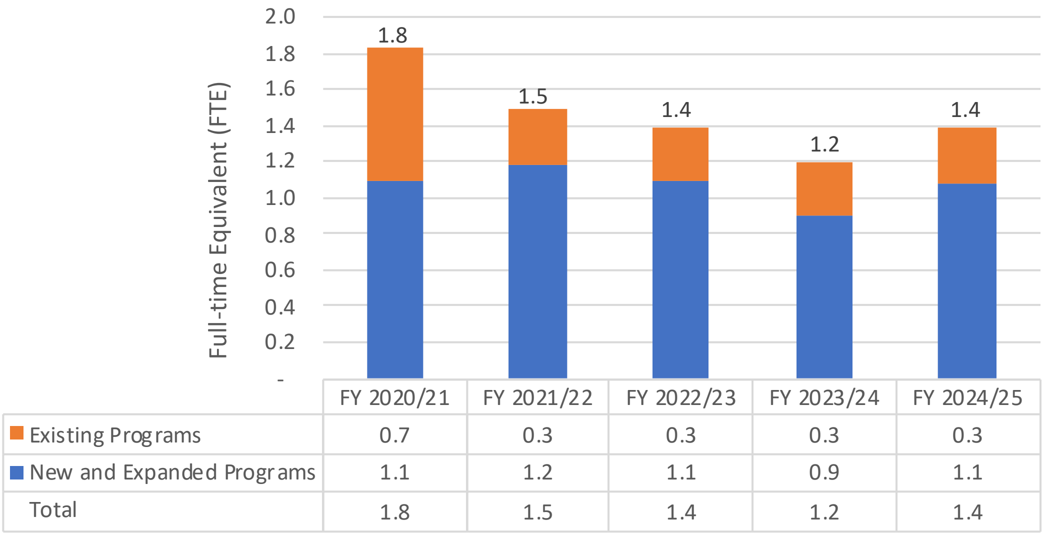
Given the estimated staffing impacts, San Marcos staff should be able to absorb additional CAP implementation activities without adding new staff. Accommodating new CAP-related activities will require reassignment and reprioritization of assigned tasks. Successful CAP implementation will require a position to be devoted to CAP implementation efforts on 0.3–0.5 FTE basis. Additional staff will not be hired, instead the CAP implementation duties will be absorbed through re-prioritization of staff position assigned to the CAP update and implementation efforts and to devote roughly 0.5 FTE on CAP related matters. The responsible position will act as clearinghouse for all CAP related implementation efforts and will continue attendance and representation on Climate related matters at regional and state level. The City should also consider establishing an inter-departmental CAP team of key positions that will be tasked with implementation efforts.

Total staffing needs to implement CAP measures is 1.8 FTE in year one and then declines to between 1.2 FTE and 1.5 FTE over the remaining four fiscal years (Figure 3). This pattern reflects start up activity in year one and then a leveling off as CAP implementation continues. New and expanded programs account for a majority of increased staffing needs.

---

[2] Note that the 10% contingency does not apply to capital cost estimates. These already include a contingency.

Figure 3 Annual Direct Staffing Impact (FTE) by Program Status



	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
🟧 Existing Programs	0.7	0.3	0.3	0.3	0.3
🟦 New and Expanded Programs	1.1	1.2	1.1	0.9	1.1
Total	1.8	1.5	1.4	1.2	1.4

Three CAP Measures Account for Most Implementation Costs

Three CAP measures account for about two-thirds of CAP implementation costs (Table 1). T-3 (Install Public Electric Vehicle Charging Stations) would have a total cost of about $1.3 million (26% of total) and annual costs of about $300,000 in years two through five.[3] T-4 (Provide Grants for Residents and Businesses to Install Electric Vehicle Charging Stations) would have a similar implementation cost of about $240,000 annually ($1.3 million total over five years) for grants. These two electric vehicle related measures would account for about half of all CAP implementation costs. Measure E-3 (Increase Grid-Supply Renewable and Zero-Carbon Electricity) would have the next highest cost at about 580,000 (12% of total).

Table 1 CAP Measures with a Total Implementation Cost Greater than $1 Million

CAP Measure	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	Total	% of Total
T-3	$0	$301,000	$308,000	$303,000	$374,000	$1,286,000	26%
T-4	$262,000	$254,000	$253,000	$254,000	$254,000	$1,277,000	26%
E-3	$77,000	$400,000	$40,000	$33,000	$34,000	$584,000	12%

Public Works Would Have the Highest Implementation Costs and Staffing Impacts

Public Works Department would have the highest level of CAP implementation cost during the first five years with between about $200,000 and $570,000 annually and a total of $2.4 million. These costs include about $774,000 for capital purchases, $794,000 in consultant fees, and $614,000 in personnel costs.

---

[3] The City is working with SDG&E to pursue AB1083 funding which could result in partial funding for this measure.

Development Services Department would have the second highest costs with about $2 million over five years. Two measures that Development Services will lead account for more than 80% of these costs: T-4 (Provide Grants for Residents and Businesses to Install Electric Vehicle Charging Stations), which would cost about $1.2 million over five years; and E-3 (Increase Grid-Supply Renewable and Zero-Carbon Electricity), which would cost about $455,000 over five years.

1.3 Next Steps and Recommendations

The San Marcos CAP Implementation Cost Analysis is a comprehensive analysis to evaluate the costs and staffing impacts to implement the CAP. It estimates the capital, personnel, consultant, and other costs to implement 22 CAP measures and the associated implementation actions over the first five year period of the CAP's implementation. As noted earlier, additional analysis can further complement this report to provide a more comprehensive estimate of not just the upfront costs but also benefits that could be achieved over time from CAP's implementation.

- **Consider Estimating the Cost and Benefit Impacts to San Marcos Residents and Businesses** – The analysis presented in this report focuses on the City's costs and staffing impacts but does not consider the potential financial implications to homes and businesses located in the City. Conducting a benefit-cost analysis provides information on how cost-effectively each CAP measure can reduce GHG emissions and provides estimates on the financial impacts to those who participate in the programs or policies. Benefit-cost analysis considers the costs (e.g., upfront costs and operations and maintenance) and benefits (e.g., utility cost savings) over the life of the project as well as the total GHG reduction over this same period. The results of this analysis could include the net cost of reducing a metric ton of GHG emissions, net present value, return on investment, internal rate of return, payback period, and benefit-cost ratio.

2 INTRODUCTION

This report summarizes the findings of the City of San Marcos (San Marcos) Climate Action Plan (CAP) Implementation Cost Analysis conducted by the Energy Policy Initiatives Center (EPIC) at the University of San Diego. The analysis estimates costs and staffing impacts to implement the activities needed to achieve the GHG emission reduction targets included in the CAP. The goals of this analysis are to estimate the:

- Total cost to San Marcos to implement GHG reduction measures included in CAP over the first five fiscal years;
- Full-time equivalent (FTE) staffing impact to implement CAP measures; and
- Incremental costs that would not have occurred without CAP adoption.

While the analysis for this report evaluated costs for the first five fiscal years, CAP measures will have associated costs beyond the timeframe presented here. Cost and staffing impact estimates in this report represent those anticipated to be incurred by San Marcos to implement the CAP measures including costs to develop and execute project and programs, develop and adopt ordinances, and conduct education and outreach activities. Costs associated with CAP coordination and reporting, including costs to assess the performance of CAP measures annually, complete regular GHG inventory updates, coordinate implementation and performance-tracking activities among departments, and prepare CAP updates are also included here. This report does not include a benefit-cost analysis to consider the costs and benefits to the City and to San Marcos residents and businesses that could be achieved over time due to implementation of CAP.

2.1 Organization of Report

The overall process used to estimate Implementation Costs is presented in Section 3. Section 4 summarizes the results of the CAP Implementation Cost Analysis. Section 5 summarizes the staffing impacts from implementing CAP measures. Section 6 summarizes the cost and staffing impact results for implementing supporting measures. Section 7 briefly discusses the limitations of the analysis.

3 CAP IMPLEMENTATION COST ANALYSIS OVERVIEW

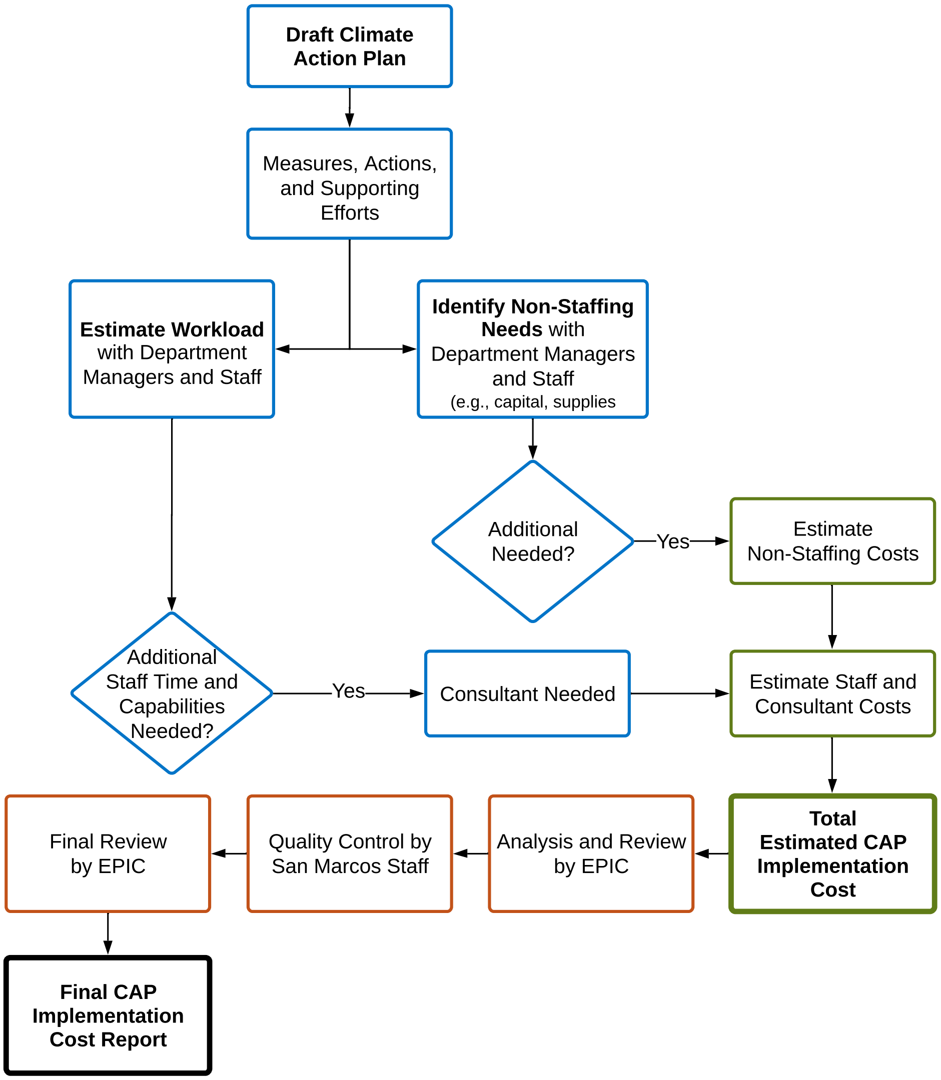
This report estimates staffing and other implementation costs anticipated during the first five fiscal years of CAP implementation. The costs and staffing impacts presented are estimates based on input and discussions with San Marcos staff that would participate in anticipated implementation actions included in the CAP. Over time as the City launches in the CAP Implementation phase, this preliminary estimate would need to be adjusted to account for changes in City's priorities and staff's workload. To account for changes in CAP implementation activities, cost, and staffing impacts, the estimates included here can be updated in the future in concert with regular CAP monitoring and updating efforts. This would provide sufficient time to better understand how implementation activities may actually occur and allow for synchronization with the San Marcos budget process.

The following sections summarize the process used to estimate CAP implementation costs and the overall framework used to identify and evaluate costs.

3.1 Process to Estimate CAP Implementation Costs

The general steps in the process to estimate CAP implementations costs were to: (1) determine the tasks required to implement CAP actions; (2) define workload associated with these tasks; and, (3) estimate staffing levels and associated costs. Figure 4 illustrates the general process used to identify resource gaps (blue boxes), estimate the cost of those resources (green boxes), compile results, conduct a review, and confirm analysis results with appropriate San Marcos staff (orange boxes).

Figure 4 Process to Develop CAP Implementation Staffing Cost Estimate

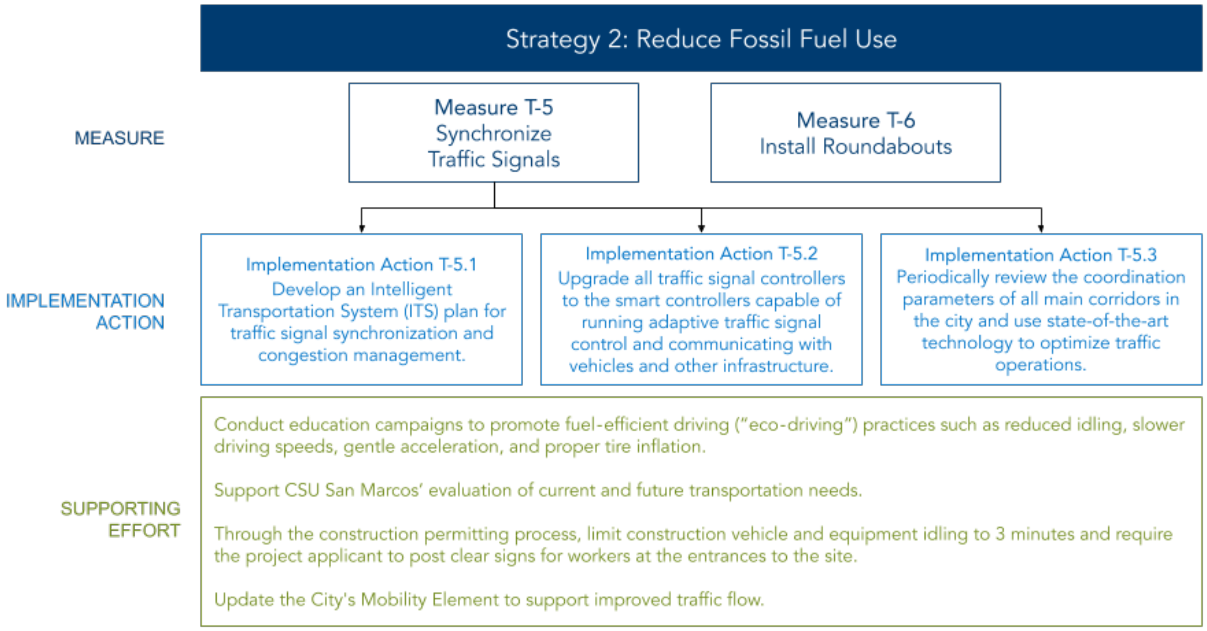

Draft Climate Action Plan
Measures, Actions, and Supporting Efforts
Estimate Workload with Department Managers and Staff
Identify Non-Staffing Needs with Department Managers and Staff (e.g., capital, supplies
Additional Needed?
Yes
Estimate Non-Staffing Costs
Additional Staff Time and Capabilities Needed?
Yes
Consultant Needed
Estimate Staff and Consultant Costs
Total Estimated CAP Implementation Cost
Analysis and Review by EPIC
Quality Control by San Marcos Staff
Final Review by EPIC
Final CAP Implementation Cost Report

3.1.1 Identify Implementation Actions

San Marcos staff identified implementation actions that represent the expected workload to implement CAP activities. The CAP comprises measures that include specific programs, policy actions, and associated actions that will be implemented to reduce GHG emissions. To better understand the potential workload and more accurately estimate associated costs, San Marcos staff, assisted by EPIC, identified preliminary implementation actions for each measure. Figure 5 illustrates the relationship between the CAP measures, actions, and supporting efforts. The San Marcos CAP includes 8 strategies, 22 measures, and implementation actions.

Preliminary cost estimates in this report represent the cost to implement activities directly related to CAP measures; that is, those related to completing implementation actions. The cost and staffing impacts to implement supporting efforts, which support multiple measures within a strategy and may not directly lead to GHG reductions, are reported separately in Section 6.

Figure 5 Structure of CAP Strategies, Measures, Action, and Supporting Efforts


Strategy 2: Reduce Fossil Fuel Use
MEASURE
Measure T-5 Synchronize Traffic Signals
Measure T-6 Install Roundabouts
IMPLEMENTATION ACTION
Implementation Action T-5.1 Develop an Intelligent Transportation System (ITS) plan for traffic signal synchronization and congestion management.
Implementation Action T-5.2 Upgrade all traffic signal controllers to the smart controllers capable of running adaptive traffic signal control and communicating with vehicles and other infrastructure.
Implementation Action T-5.3 Periodically review the coordination parameters of all main corridors in the city and use state-of-the-art technology to optimize traffic operations.
SUPPORTING EFFORT
Conduct education campaigns to promote fuel-efficient driving ("eco-driving") practices such as reduced idling, slower driving speeds, gentle acceleration, and proper tire inflation.
Support CSU San Marcos' evaluation of current and future transportation needs.
Through the construction permitting process, limit construction vehicle and equipment idling to 3 minutes and require the project applicant to post clear signs for workers at the entrances to the site.
Update the City's Mobility Element to support improved traffic flow.

3.1.2 Establish Preliminary Cost Estimates

Once the implementation actions were developed, San Marcos staff estimated staffing effort (in hours) and the cost of non-staffing costs like capital, consultants, and materials and supplies that would be required to implement CAP actions. To facilitate and standardize the collection of implementation cost data provided by San Marcos staff across several departments, EPIC created a data collection template. San Marcos staff conducted meetings with department managers and staff representatives to further discuss cost estimates and cost data collection.

The cost and staffing impacts estimates presented in this study reflect the staffing costs to implement the activities in the CAP. They are based on assumptions of the work effort needed to implement the CAP actions. If the CAP measures change over time, implementation costs could be different from those reported here and would need to be adjusted.

3.1.3 Quality Assurance and Quality Control (QA/QC)

Quality control and data validation occurred at several stages. Primary validation occurred after total estimated costs and staffing impact were collected. EPIC and San Marcos staff performed an internal quality control check, updated key managers, and reviewed costs with Department/Division managers and staff. Based on this initial review, some cost components were updated to create consistency across all departments and to create a complete data set. San Marcos staff also conducted a detailed consistency check to ensure internal cost reporting consistency. EPIC conducted a final review of all costs prior to inclusion in this report.

3.2 Costs Evaluated

CAP implementation cost estimates presented here include those incurred to implement programs and activities related to specific CAP measures (including education and outreach, and ordinance development, etc.), and those related to overall CAP coordination and reporting (including updating the GHG inventory, the monitoring and reporting progress, and updating the CAP). While the CAP coordination and reporting activities are not specifically included in the CAP as measures, they will require staff time and other costs; therefore, they are included in the estimates presented in this report. As noted above, cost and staffing impacts for supporting measures are reported separately in Section 6.

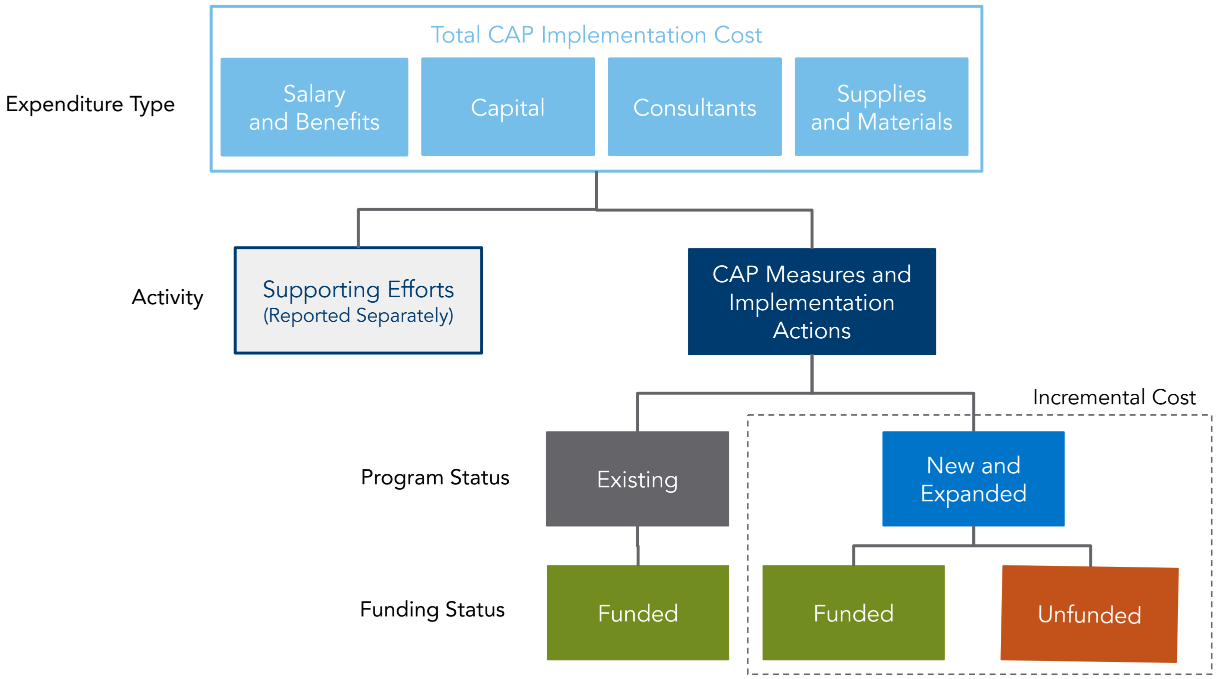
3.2.1 Framework for Evaluating CAP Costs

The goals of the CAP Implementation Cost analysis are to develop a preliminary estimate of the total cost to implement GHG reductions measures over the first five fiscal years, evaluate costs based on Program Status (e.g., existing versus new and expanded programs) to determine the estimated incremental costs associated with new and expanded programs that would not have occurred without the CAP, and evaluate costs based on funding status (e.g., funded versus unfunded) to determine which activities require additional financial resources to implement.

Figure 6 illustrates this cost analysis framework. Total implementation costs comprise salary and benefits, capital, consultants, and supplies and materials. For this analysis, implementation activities directly related to CAP measures and implementation actions were separated from those related to supporting efforts. As noted above, supporting efforts are grouped by CAP strategy and include more than one measure. Because these efforts do not necessarily directly result in GHG reductions and may or may not occur, they were separated from other costs and reported separately in Section 6.

Activities that directly implement CAP measures can be divided into existing and new and expanded programs. For purposes of this analysis, existing programs are those that are already being implemented, or are planned through other ongoing programs, and would have occurred regardless of CAPs requirements. New and expanded programs are those that currently do not exist or the expanded portion of existing programs that would not have occurred without CAP adoption. Based on the analysis conducted for this report, all existing programs have identified funding sources (i.e., funded) but new and expanded programs can have funded or unfunded activities. Costs associated with new and expanded activities represent the incremental costs to implement CAP measures. The unfunded portion represents additional costs to San Marcos that directly result from the CAP.

Figure 6 Framework for Evaluating CAP Implementation Costs



3.2.2 Contingency

A contingency of 10% is applied to total preliminary cost estimates to account for uncertainty. Since capital cost estimates already include a contingency of 25% or higher, the 10% is not applied to those costs. As a consequence, the values for total cost plus contingency do not equal the total cost multiplied by 10%.

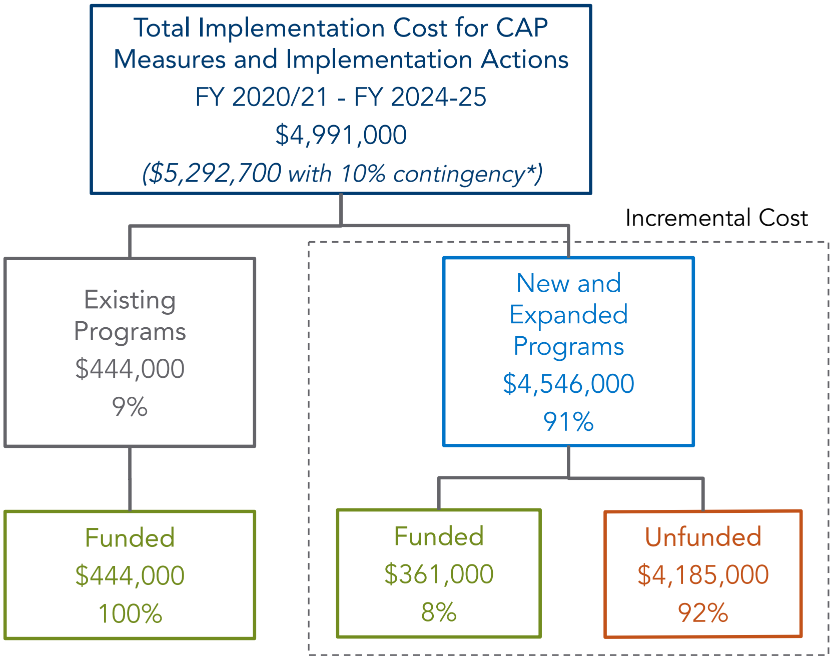
4 RESULTS – CAP IMPLEMENTATION COSTS

This section presents the results of the San Marcos CAP Implementation Cost Analysis and answers the question: **What are the costs and staffing impacts to San Marcos to implement the CAP activities over the first five fiscal years?** It presents an overall summary of results for the first five fiscal years and summarizes results by San Marcos department, staff position, CAP measure, and CAP strategy. Results for supporting efforts are reported separately in Section 6 of this report.

4.1 Total CAP Implementation Costs

The total estimated direct implementation cost—not including supporting efforts—over the first five fiscal years (FY 2020–21–FY 2024–25) is about $5 million (Figure 7). With a 10% contingency applied to all anticipated costs other than capital expenditures, the total cost would be nearly $5.3 million. The vast majority of these costs, about $4.5 million (91%), are associated with new and expanded programs and represent incremental costs that result from the CAP. Of this total, about $4.2 million, or 92% of new and expanded program costs, are unfunded. This amount represents the estimated new costs to San Marcos to implement CAP activities over the first five fiscal years.

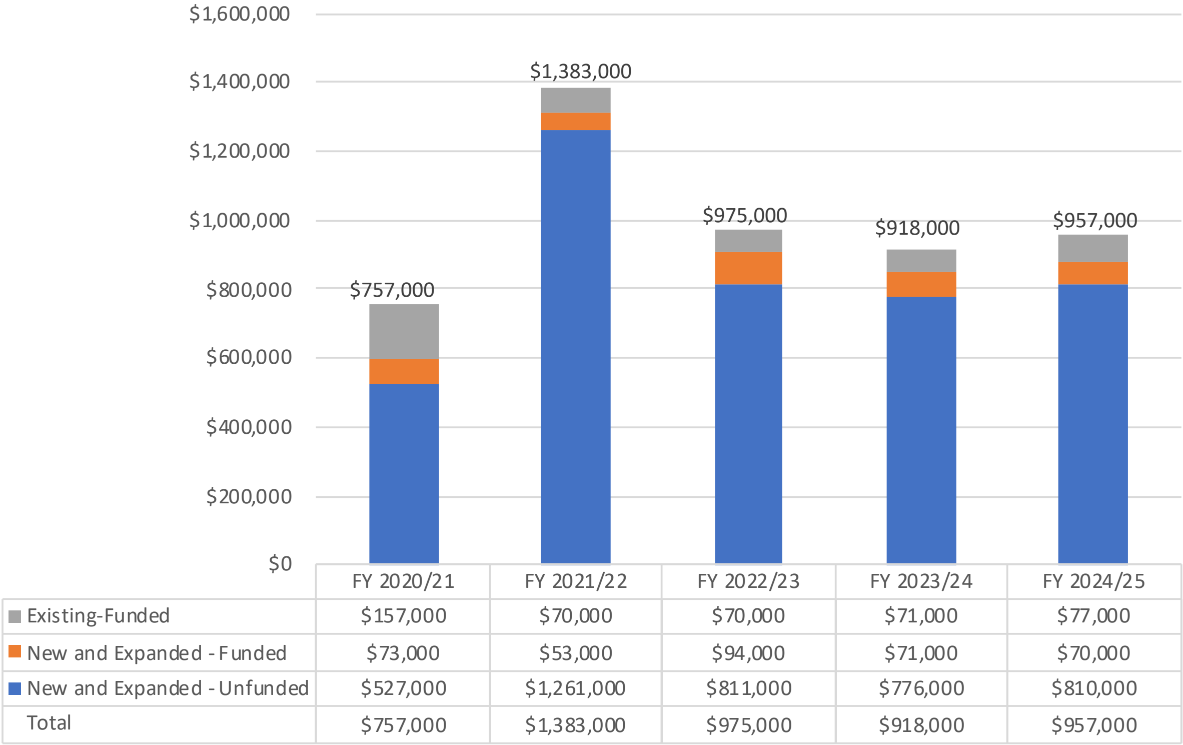
Figure 7 Total CAP Implementation Costs Summary Diagram (FY21–FY25)



*10% contingency is not added to Capital costs since the estimate already includes 25% or higher contingency.

Estimated annual total CAP implementation costs are $760,000 in in the first year, increase to about $1.4 million in year two, and then level off at between $918,000 and $975,000 for the remaining three years. (Figure 8). The vast majority of costs, about $600,000 to $1.3 million, are associated with new and expanded programs (blue plus orange bars) and represent the annual incremental costs to implement CAP activities. Over 90% of these costs are unfunded (blue bars). Annual costs of existing programs (gray bars) are highest in year one with a total of about $157,000 and then remains steady at about $70,000 over the remaining four years.

Figure 8 Annual Direct CAP Implementation Costs by Program Status (FY21-FY25)



	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
◼ Existing-Funded	$157,000	$70,000	$70,000	$71,000	$77,000
🟧 New and Expanded - Funded	$73,000	$53,000	$94,000	$71,000	$70,000
🟦 New and Expanded - Unfunded	$527,000	$1,261,000	$811,000	$776,000	$810,000
Total	$757,000	$1,383,000	$975,000	$918,000	$957,000

4.2 Costs by Measure

This section summarizes the total estimated costs to implement CAP activities associated with each GHG reduction measure included in the CAP. As noted in Section 3, the CAP has 8 main strategies, which comprise 22 measures and 79 implementation actions. In addition, this report also includes staffing and cost impacts related to CAP coordination and reporting activities. Table 2 provides a list of CAP strategies and measures for which costs are provided in this Section.

Table 2 San Marcos Draft CAP Measures

Strategy 1: Increase Use of Zero-Emission or Alternative Fuel Vehicles	
T-1	Transition to a Clean and More Fuel Efficient Municipal Vehicle Fleet
T-2	Require Electric Vehicle Charging Stations at New Developments
T-3	Install Public Electric Vehicle Charging Stations
T-4	Provide Grants for Residents and Businesses to Install EV Charging Stations
Strategy 2: Reduce Fossil Fuel Use	
T-5	Synchronize Traffic Lights
T-6	Install Roundabouts
Strategy 3: Reduce Vehicle Miles Traveled	
T-7	Participate in the San Diego Association of Government's iCommute Vanpool Program
T-8	Implement Bicycle Network as identified in the General Plan-Mobility Element
T-9	Adopt Citywide Transportation Demand Management (TDM) Ordinance
T-10	Implement the Intra-City Shuttle System
T-11	Increase Transit Ridership
T-12	Reduce Parking Requirements for New Residential Development near Transit
T-13	Work with Existing Employers to Implement Transportation Demand Management Plans
T-14	Transition to an Online Building and Engineering Permit Submittal System
Strategy 4: Increase Building Energy Efficiency	
E-1	Require New Residential Developments to Install Alternatively-Fueled Water Heater
Strategy 5: Increase Renewable and Zero-Carbon Energy	
E-2	Require Installation of PV Systems at New Non-Residential Developments
E-3	Increase Grid-Supply Renewable and Zero-Carbon Electricity
Strategy 6: Reduce Water Use	
W-1	Reduce Outdoor Landscape Water Use
W-2	Reduce Current City Managed Landscaping Water Use
Strategy 7: Reduce and Recycle Solid Waste	
S-1	Increase Citywide Waste Diversion
Strategy 8: Increase Urban Tree Cover	
CS-1	Increase Tree Planting at City Parks and Public Rights-of-Way
CS-2	Increase Tree Planting at New Development

Table 3 shows annual costs by CAP Measure sorted from highest to lowest. Note that the colors in the table show the range of costs. Higher costs are in red, lower costs are in green, and those in the middle are in yellow/orange.

Measures T-3 (Install Electric Vehicle Charging Stations at Public Facilities) and T-4 (Provide Grants for Residents and Business to Install Electric Vehicle Charging Stations) would have the highest implementation cost over the first five years, together representing over 50% of total implementation costs. Each would cost about $1.3 million over this period, about 26% of total implementation costs.

For Measures T-3 (Install Electric Vehicle Charging Stations at Public Facilities), these costs are mainly for capital expenditures for electric vehicle charging equipment (about $190,000 annually for the first four years) and consultant costs to support project design and construction (about $95,000 annually over the same period). For T-4 (Provide Grants for Residents and Business to Install Electric Vehicle Charging Stations), nearly all costs ($1.2 million or $240,000 annually over five years) are associated with funding for grants.

Another notable cost would be the $400,000 expenditure in year two for measure E-3 (Increase Grid-Supply Renewable and Zero-Carbon Electricity). This is mostly for a consultant to support exploration and potential establishment of a Community Choice Energy program.

Table 3 Annual Direct CAP Implementation Costs by Measure and Supporting Efforts (FY21-FY25)[4]

CAP Measure	FY 2020/21	FY 2021/22	Y 2022/23	Y 2023/24	Y 2024/25	Total	% of Total
T-3	$0	$301,000	$308,000	$303,000	$374,000	$1,286,000	26%
T-4	$262,000	$254,000	$253,000	$254,000	$254,000	$1,277,000	26%
E-3	$77,000	$400,000	$40,000	$33,000	$34,000	$584,000	12%
T-14	$135,000	$51,000	$50,000	$52,000	$54,000	$342,000	7%
W-2	$69,000	$51,000	$78,000	$61,000	$66,000	$324,000	6%
T-5	$68,000	$46,000	$29,000	$30,000	$31,000	$204,000	4%
T-9	$0	$69,000	$47,000	$38,000	$14,000	$168,000	3%
T-13	$0	$39,000	$40,000	$39,000	$39,000	$157,000	3%
C-1	$31,000	$30,000	$31,000	$32,000	$33,000	$156,000	3%
T-8	$15,000	$49,000	$34,000	$24,000	$3,000	$125,000	3%
W-1	$19,000	$11,000	$8,000	$9,000	$9,000	$56,000	1%
CCR	$9,000	$12,000	$8,000	$12,000	$10,000	$52,000	1%
T-1	$9,000	$8,000	$10,000	$9,000	$15,000	$51,000	1%
T-2	$25,000	$18,000	$2,000	$0	$0	$46,000	1%
E-1	$0	$37,000	$4,000	$1,000	$1,000	$43,000	1%
E-2	$31,000	$3,000	$3,000	$3,000	$3,000	$43,000	1%
T-12	$0	$0	$15,000	$9,000	$4,000	$29,000	1%
T-7	$0	$0	$10,000	$7,000	$8,000	$25,000	1%
T-10	$2,000	$2,000	$2,000	$2,000	$2,000	$11,000	0%
T-6	$2,000	$2,000	$2,000	$2,000	$2,000	$10,000	0%
C-2	$2,000	$0	$0	$0	$0	$3,000	0%
S-1	N/C	N/C	N/C	N/C	N/C	N/C	N/C
T-11	N/C	N/C	N/C	N/C	N/C	N/C	N/C
Total	**$757,000**	**$1,383,000**	**$975,000**	**$918,000**	**$957,000**	**$4,991,000**	**100%**
*Total with 10% Contingency**	*$809,700*	*$1,478,100*	*$1,029,300*	*$966,400*	*$1,009,200*	*$5,292,700*	

*10% contingency is not added to Capital costs since the estimate already includes 25% or higher contingency.

N/C - Not Calculated. Measures are expected to be implemented in years 6-10.

4.3 Costs by Department

The Public Works Department would have the highest level of CAP implementation cost during the first five years of between $195,000 and $570,000 annually and a total of $2.4 million. These costs, which represent nearly 50% of total costs, comprise capital expenditures of $774,000, consultant costs of $794,000, and personnel costs of $615,000.

The Development Services Department would have the second highest estimated costs with about $2 million over five years, 41% of total costs. Two measures that Development Services will lead account for more than 80% of these costs: T-4 (Provide Grants for Residents and Businesses to

---

[4] Measures S-1 and T-11 would not have any activity in the first five years of implementation.

Install Electric Vehicle Charging Stations) with $1.2 million over five years, and E-3 (Increase Grid-Supply Renewable and Zero-Carbon Electricity) with $455,000 over five years.

Figure 9 and Table 4 summarize annual CAP implementation costs by City Department.

Figure 9 Annual Direct CAP Implementation Costs by Department (FY21–FY25)

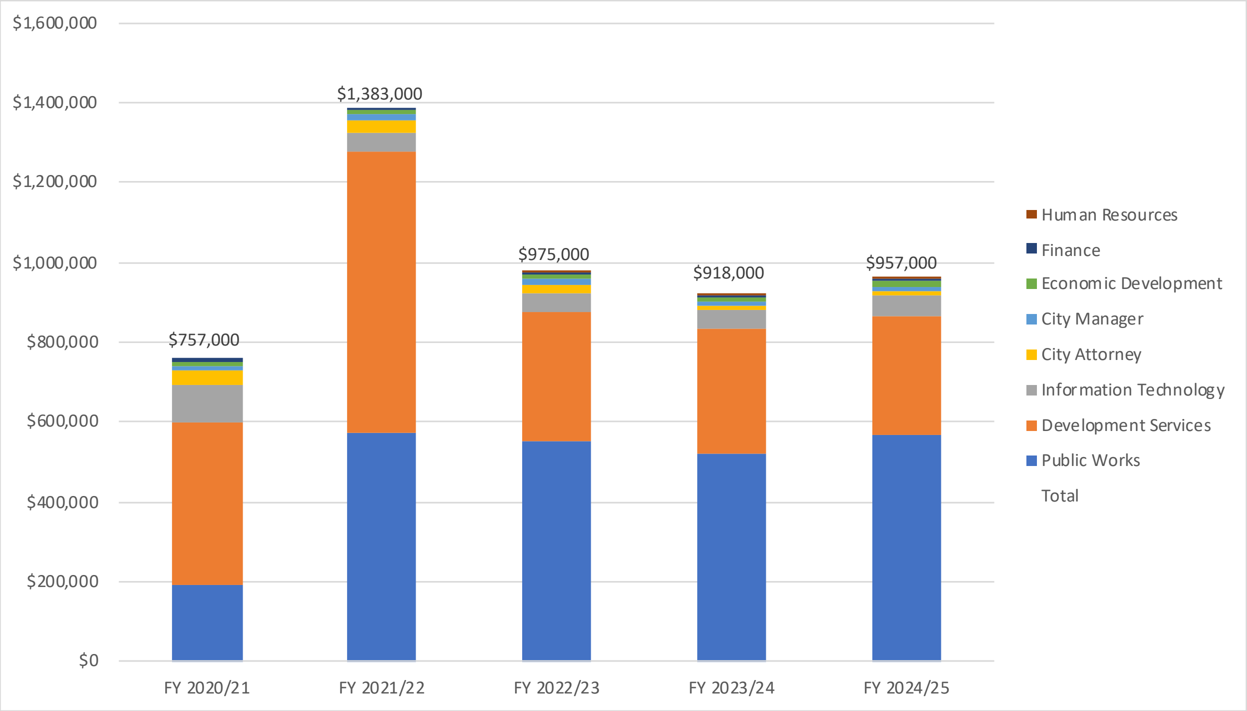


Table 4 Annual Direct CAP Implementation Costs by Department (FY21-FY25)

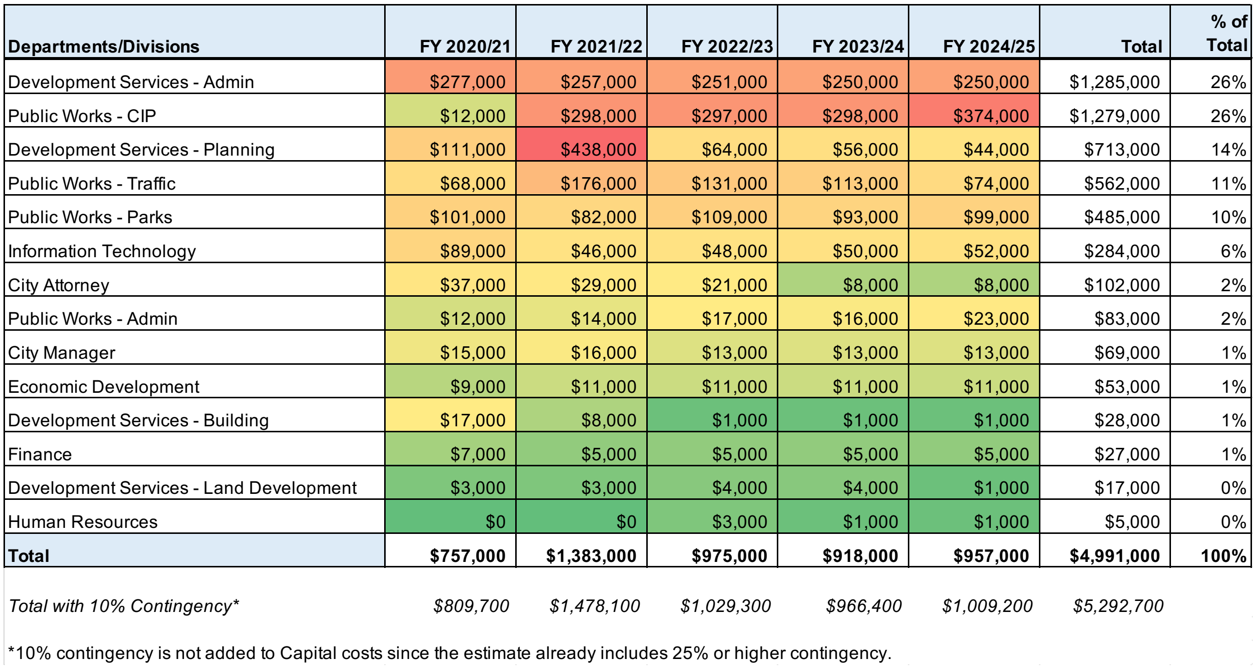
Department	**FY 2020/21**	**FY 2021/22**	**FY 2022/23**	**FY 2023/24**	**FY 2024/25**	**Total**	**% of Total**
Public Works	$194,000	$571,000	$554,000	$520,000	$570,000	$2,409,000	48%
Development Services	$407,000	$707,000	$321,000	$311,000	$297,000	$2,043,000	41%
Information Technology	$89,000	$46,000	$48,000	$50,000	$52,000	$284,000	6%
City Attorney	$37,000	$29,000	$21,000	$8,000	$8,000	$102,000	2%
City Manager	$15,000	$16,000	$13,000	$13,000	$13,000	$69,000	1%
Economic Development	$9,000	$11,000	$11,000	$11,000	$11,000	$53,000	1%
Finance	$7,000	$5,000	$5,000	$5,000	$5,000	$27,000	1%
Human Resources	$0	$0	$3,000	$1,000	$1,000	$5,000	0%
Total	**$757,000**	**$1,383,000**	**$975,000**	**$918,000**	**$957,000**	**$4,991,000**	**100%**
*Total with 10% Contingency**	*$809,700*	*$1,478,100*	*$1,029,300*	*$966,400*	*$1,009,200*	*$5,292,700*	

*10% contingency is not added to Capital costs since the estimate already includes 25% or higher contingency.

4.3.1 Costs by Division

The two Divisions that would have highest estimated implementation costs—Admin Division within Development Services and the CIP Division within Public Works—account for over 50% of total costs over the first five years. Each Division would have costs of about $1.3 million (26% of total) (Table 5). The Planning Division within Development Services would have next highest implementation costs, with just over $700,000 respectively over the analysis period (14% of total). Two other divisions in Public Works (Traffic, and Parks & Landscape) account for about 20% of total costs.

Table 5 Annual Direct CAP Implementation Costs by Division



Departments/Divisions	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	Total	% of Total
Development Services - Admin	$277,000	$257,000	$251,000	$250,000	$250,000	$1,285,000	26%
Public Works - CIP	$12,000	$298,000	$297,000	$298,000	$374,000	$1,279,000	26%
Development Services - Planning	$111,000	$438,000	$64,000	$56,000	$44,000	$713,000	14%
Public Works - Traffic	$68,000	$176,000	$131,000	$113,000	$74,000	$562,000	11%
Public Works - Parks	$101,000	$82,000	$109,000	$93,000	$99,000	$485,000	10%
Information Technology	$89,000	$46,000	$48,000	$50,000	$52,000	$284,000	6%
City Attorney	$37,000	$29,000	$21,000	$8,000	$8,000	$102,000	2%
Public Works - Admin	$12,000	$14,000	$17,000	$16,000	$23,000	$83,000	2%
City Manager	$15,000	$16,000	$13,000	$13,000	$13,000	$69,000	1%
Economic Development	$9,000	$11,000	$11,000	$11,000	$11,000	$53,000	1%
Development Services - Building	$17,000	$8,000	$1,000	$1,000	$1,000	$28,000	1%
Finance	$7,000	$5,000	$5,000	$5,000	$5,000	$27,000	1%
Development Services - Land Development	$3,000	$3,000	$4,000	$4,000	$1,000	$17,000	0%
Human Resources	$0	$0	$3,000	$1,000	$1,000	$5,000	0%
Total	**$757,000**	**$1,383,000**	**$975,000**	**$918,000**	**$957,000**	**$4,991,000**	**100%**
*Total with 10% Contingency**	*$809,700*	*$1,478,100*	*$1,029,300*	*$966,400*	*$1,009,200*	*$5,292,700*	

*10% contingency is not added to Capital costs since the estimate already includes 25% or higher contingency.

4.4 Costs by Expenditure Category

Expenditure categories in this analysis include capital, personnel (salary and benefits), consultant costs, and materials and supplies. Figure 10 summarizes the breakdown of CAP implementation costs by expenditure category.

- Capital – Capital expenditures is the largest category of CAP Implementation Costs representing about 40% of total costs over the analysis period. Examples of capital expenditures associated with CAP implementation could include purchase of electric vehicle chargers, and trees.
- Salary and Benefits – Personnel represents the salary and benefits costs associated with CAP implementation. This category would account for about 32% of total costs over the five years. Salary and benefit costs include current base salary, benefits like health insurance and retirement. Hourly rates are specific to each department and include an annual increase of 4% over the five year period.

- **Consultants** – If existing San Marcos personnel either do not have capacity or expertise to complete an activity related to CAP implementation, consultant support and services can be used. About 23% of estimated CAP implementation costs are for consultant support. This can include project design and development, feasibility studies, and plan development.
- **Materials and Supplies** – Materials and supplies, which accounts for 5% of costs, comprises purchases (e.g., education and outreach materials) needed to implement CAP measures.

Figure 10 Breakdown of CAP Implementation Costs by Expenditure Category

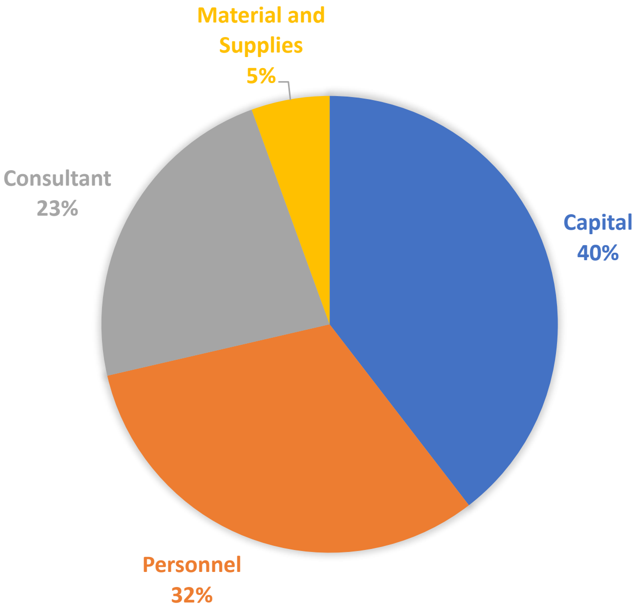
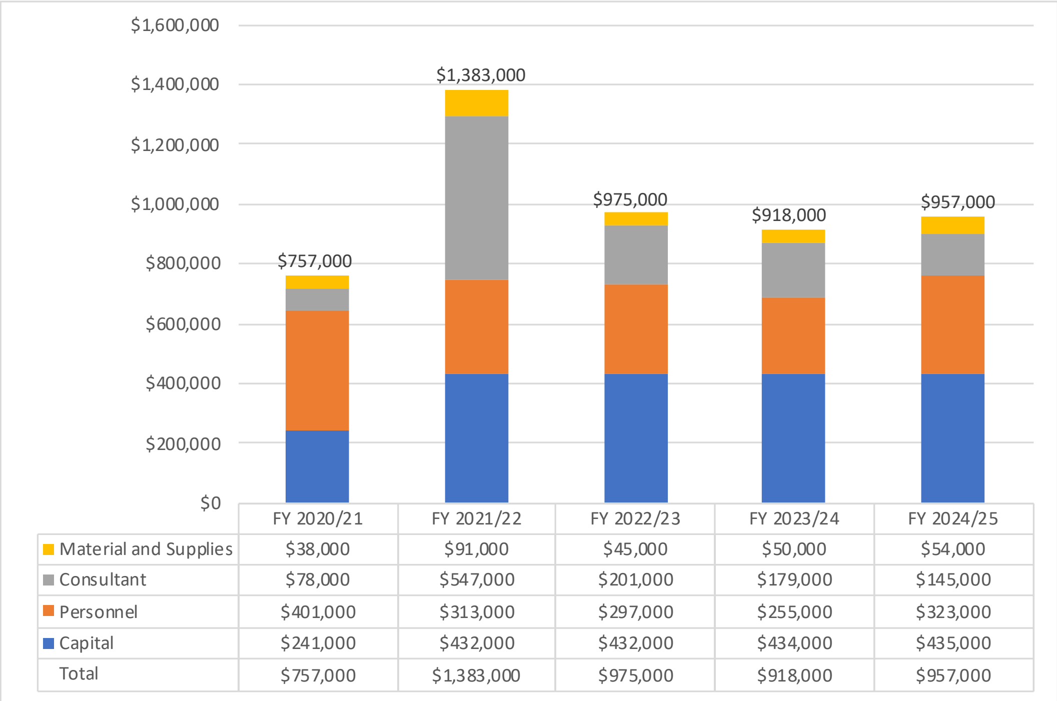


Figure 11 shows estimated annual CAP implementation costs by expenditure category. Annual capital costs would be $241,000 in year one and increase to about $435,000 in the remaining four years. Personnel costs would vary between $250,000 and $400,000 over the five years. Consultant costs are significantly higher in year two due in part to analysis related to Community Choice Energy programs. Materials and supplies costs are comparatively low over the period of analysis.

Figure 11 Annual Direct CAP Implementation Costs by Expenditure Category



	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
🟨 Material and Supplies	$38,000	$91,000	$45,000	$50,000	$54,000
◼ Consultant	$78,000	$547,000	$201,000	$179,000	$145,000
🟧 Personnel	$401,000	$313,000	$297,000	$255,000	$323,000
🟦 Capital	$241,000	$432,000	$432,000	$434,000	$435,000
Total	$757,000	$1,383,000	$975,000	$918,000	$957,000

4.4.1 Breakdown by Department and Division

Table 6 shows estimated CAP implementation costs by department and expenditure category. Costs associated with Development Services account for about 60% of capital expenditures. Public Works would account for 70% of estimated costs in consultant, and 80% of materials and supply, and 50% of personnel costs. Development Services accounts for the balance of total costs for capital, consulting, and materials and supplies, and 27% of estimated personnel costs.

Table 6 CAP Direct Implementation Cost by Department and Expenditure Category

Department	Capital	Consultant	Material and Supplies	Personnel	Total	% of Total
Public Works	$774,000	$794,000	$227,000	$614,000	$2,409,000	48%
Development Services	$1,200,000	$357,000	$50,000	$436,000	$2,043,000	41%
Information Technology	$0	$0	$0	$284,000	$284,000	6%
City Attorney	$0	$0	$0	$102,000	$102,000	2%
City Manager	$0	$0	$0	$69,000	$69,000	1%
Economic Development	$0	$0	$0	$53,000	$53,000	1%
Finance	$0	$0	$0	$27,000	$27,000	1%
Human Resources	$0	$0	$0	$5,000	$5,000	0%
Total	**$1,974,000**	**$1,151,000**	**$277,000**	**$1,589,000**	**$4,991,000**	**100%**
*Total with 10% Contingency**	*$1,974,000*	*$1,266,000*	*$305,000*	*$1,748,000*	*$5,293,000*	

*10% contingency is not added to Capital costs since the estimate already includes 25% or higher contingency.

Table 7 shows estimated CAP implementation costs by City Division and expenditure category. The Development Services Admin Division and Public Works CIP Division each accounts for about $1.3 million over the first five years, about 26% of total CAP implementation costs. About 60% of all capital expenditures would be associated with the Development Services Admin Division. These expenditures would be for grants for electric vehicle charging equipment. The Planning Division of Development Services would account for $713,000, or 14% of total implementation costs over the analysis period.

Table 7 Direct CAP Implementation Costs by Division and Expenditure Category

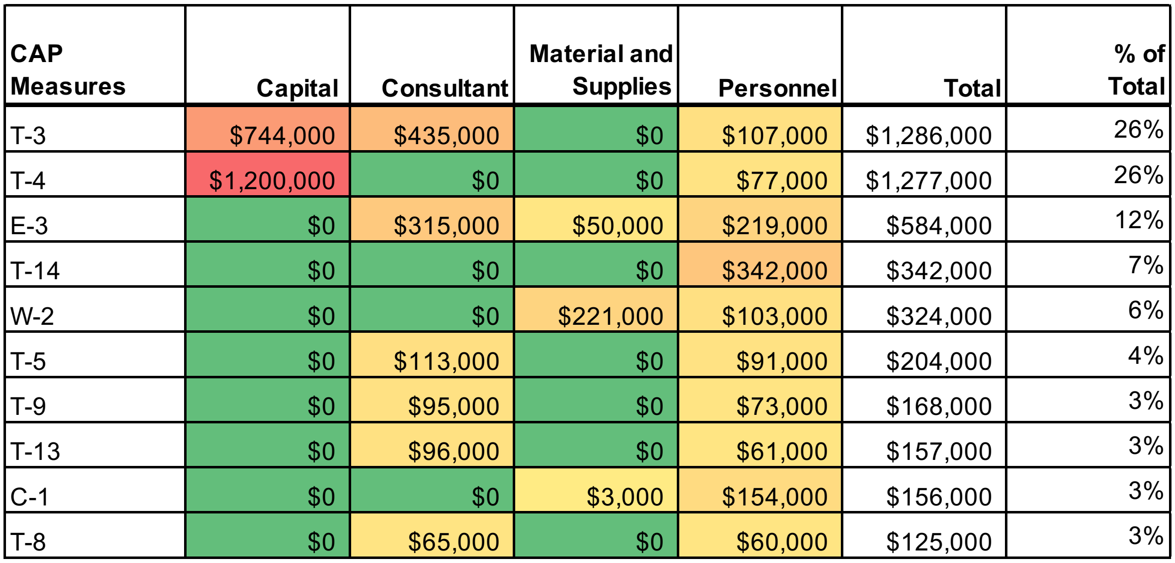
Department / Division	Capital	Consultant	Material and Supplies	Personnel	Total	% of Total
Development Services - Admin	$1,200,000	$0	$0	$85,000	$1,285,000	26%
Public Works - CIP	$744,000	$425,000	$0	$110,000	$1,279,000	26%
Development Services - Planning	$0	$357,000	$50,000	$306,000	$713,000	14%
Public Works - Traffic	$0	$369,000	$0	$193,000	$562,000	11%
Public Works - Parks	$0	$0	$227,000	$258,000	$485,000	10%
Information Technology	$0	$0	$0	$284,000	$284,000	6%
City Attorney	$0	$0	$0	$102,000	$102,000	2%
Public Works - Admin	$30,000	$0	$0	$53,000	$83,000	2%
City Manager	$0	$0	$0	$69,000	$69,000	1%
Economic Development	$0	$0	$0	$53,000	$53,000	1%
Development Services - Building	$0	$0	$0	$28,000	$28,000	1%
Finance	$0	$0	$0	$27,000	$27,000	1%
Development Services - Land Development	$0	$0	$0	$17,000	$17,000	0%
Human Resources	$0	$0	$0	$5,000	$5,000	0%
Total	**$1,974,000**	**$1,151,000**	**$277,000**	**$1,589,000**	**$4,991,000**	**100%**
*Total with 10% Contingency**	*$1,974,000*	*$1,266,100*	*$304,700*	*$1,747,900*	*$5,292,700*	

*10% contingency is not added to Capital costs since the estimate already includes 25% or higher contingency.

4.4.2 Breakdown by Measure

Table 8 provides a breakdown of costs by expenditure type for measures with a total cost greater than $100,000. Remaining measures below $100,000 would have mostly personnel costs. Two measures related to electric vehicles would account for over 50% of all estimated CAP implementation costs, including nearly all capital costs and about 40% of consultant costs. T-3 (Install Public Electric Vehicle Charging Stations) would require about $744,000 in capital costs and $435,000 in consulting support. T-4 (Provide Grants for Residents and Businesses to Install Electric Vehicle Charging Stations) would require $1.2 million in capital costs to offset the cost of electric vehicle charging stations.

Table 8 Breakdown of Direct CAP Implementation Costs by Expenditure Category (Measures >$100,000)



CAP Measures	Capital	Consultant	Material and Supplies	Personnel	Total	% of Total
T-3	$744,000	$435,000	$0	$107,000	$1,286,000	26%
T-4	$1,200,000	$0	$0	$77,000	$1,277,000	26%
E-3	$0	$315,000	$50,000	$219,000	$584,000	12%
T-14	$0	$0	$0	$342,000	$342,000	7%
W-2	$0	$0	$221,000	$103,000	$324,000	6%
T-5	$0	$113,000	$0	$91,000	$204,000	4%
T-9	$0	$95,000	$0	$73,000	$168,000	3%
T-13	$0	$96,000	$0	$61,000	$157,000	3%
C-1	$0	$0	$3,000	$154,000	$156,000	3%
T-8	$0	$65,000	$0	$60,000	$125,000	3%

4.5 Costs by CAP Strategy

Three strategies would account for about 80% of total estimated CAP implementation costs over five years. Strategy 1 (Increase Use of Zero-Emission or Alternative Fuel Vehicles) would account for about $2.6 million in costs, about 53% of total costs. Strategy 3 (Reduce Vehicle Miles Traveled) would cost $855,000 (17%) and Strategy 5 (Increase Renewable and Zero-Carbon Energy) would require about $625,000 (13%). This would be expected since transportation and energy account for the majority of GHG emissions in the San Marcos. Figure 12 and Table 9 show annual CAP implementation cost by CAP Strategy. While CAP Coordination and Reporting is not a CAP strategy, it is included in Figure 12 and Table 9 for comparison.

Figure 12 Annual CAP Implementation Costs by CAP Strategy

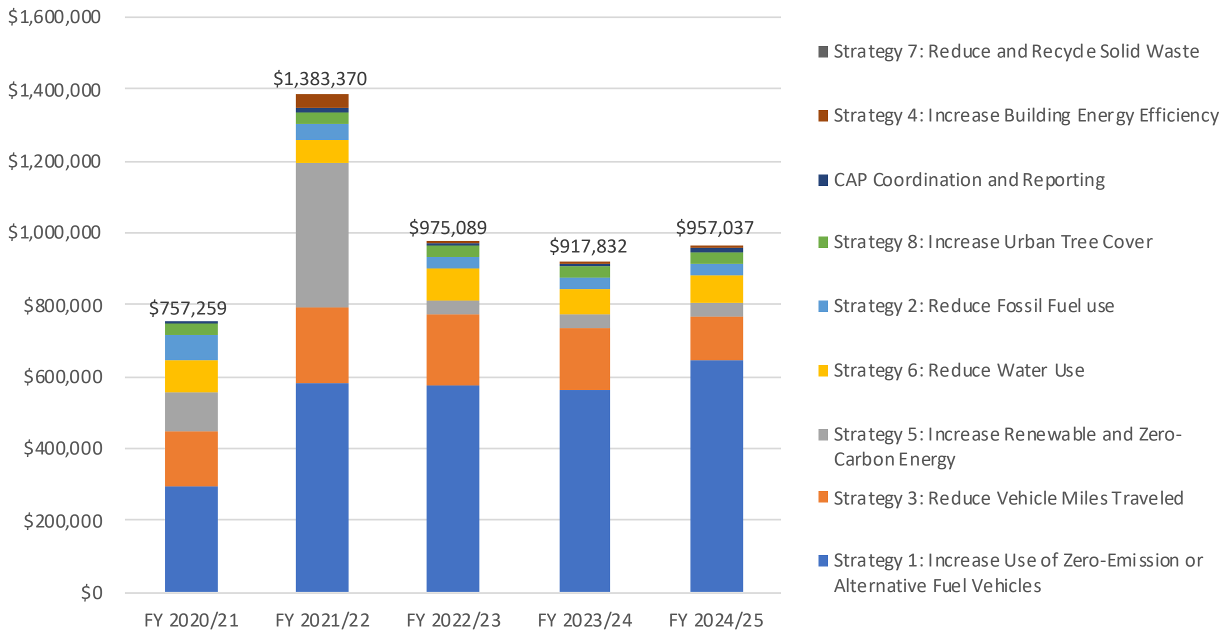


Table 9 Annual CAP Implementation Costs by CAP Strategy

CAP Strategy	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25	Total	% of Total
Strategy 1: Increase Use of Zero-Emission or Alternative Fuel Vehicles	$296,380	$581,787	$573,303	$565,394	$643,921	$2,660,785	53%
Strategy 3: Reduce Vehicle Miles Traveled	$151,885	$210,824	$198,173	$170,658	$123,677	$855,217	17%
Strategy 5: Increase Renewable and Zero-Carbon Energy	$108,311	$402,285	$42,938	$35,823	$37,256	$626,615	13%
Strategy 6: Reduce Water Use	$88,121	$62,004	$85,881	$69,446	$75,109	$380,561	8%
Strategy 2: Reduce Fossil Fuel use	$69,757	$47,955	$31,369	$32,024	$32,705	$213,811	4%
Strategy 8: Increase Urban Tree Cover	$33,548	$30,117	$30,890	$31,891	$33,147	$159,593	3%
CAP Coordination and Reporting	$9,256	$11,606	$8,285	$11,879	$10,478	$51,503	1%
Strategy 4: Increase Building Energy Efficiency	$0	$36,791	$4,251	$716	$745	$42,502	1%
Strategy 7: Reduce and Recycle Solid Waste	$0	$0	$0	$0	$0	$0	0%
Total	**$757,259**	**$1,383,370**	**$975,089**	**$917,832**	**$957,037**	**$4,990,587**	**100%**
Total with Contingency (10%)*	$809,700	$1,478,100	$1,029,300	$966,400	$1,009,200	$5,292,700	

*10% contingency is not added to Capital costs since the estimate already includes 25% or higher contingency.

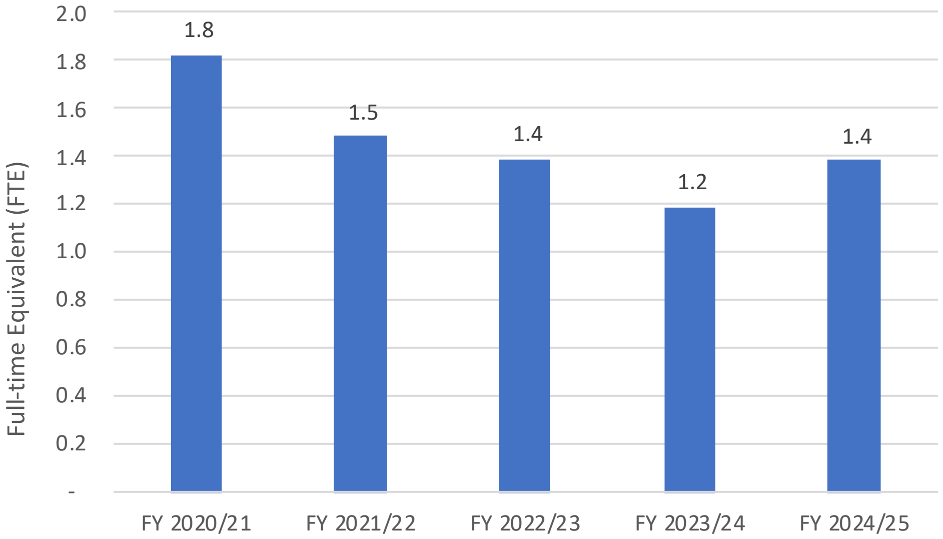
5 RESULTS – STAFFING IMPACTS (FTE)

This section presents the results of the San Marcos CAP Implementation Cost Analysis and answers the question: **What are the staffing impacts (FTE) to San Marcos to implement the CAP over the first five fiscal years?** It presents an overall summary of staffing costs for the first five fiscal years and summarizes results by San Marcos department, staff position, CAP measure, and CAP strategy. Staffing impacts for supporting measures are reported separately in Section 6.

5.1 Overall Staff Impacts

Total annual staffing needs to implement CAP measures is 1.8 FTE in year one and then declines to between 1.2 FTE and 1.5 FTE over the remaining four fiscal years of CAP implementation (Figure 13). This pattern reflects start up activity in year one and then a leveling off over the final four years, and represents a conservative scenario of staff time required to implement CAP measures. The final years could represent a pattern that could continue beyond the timeframe of this report.

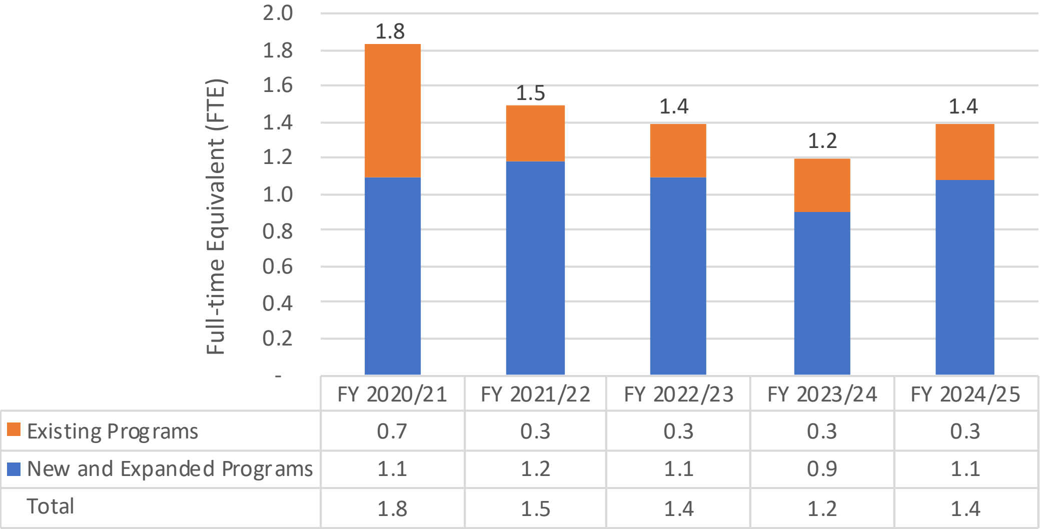
Figure 13 Annual Direct Staffing Impact (FTE)



Given the estimated staffing impacts, San Marcos staff should be able to implement CAP implementation activities without adding new staff. However, accommodating new CAP-related activities likely will require reassignment and reprioritization of current responsibilities of affected staff. Also, based on preliminary cost analysis and observations from other cities that have implemented CAP activities, it may be necessary to reallocate a portion of an existing position to be devoted to CAP implementation efforts. It is reasonable to expect that this could require about 0.3 FTE to 0.5 FTE. Because the City has determined that additional staff will not be hired for CAP implementation, these CAP coordination and implementation duties could be absorbed through re-prioritization of an existing staff position.

As with overall CAP implementation costs, the majority of staffing impacts would be associated with new and expanded programs (Figure 14). The portion of staff effort associated with new and expanded programs ranges from 0.9 FTE to 1.2 FTE over the first five years.

Figure 14 Annual Direct Staffing Impact (FTE) by Program Status

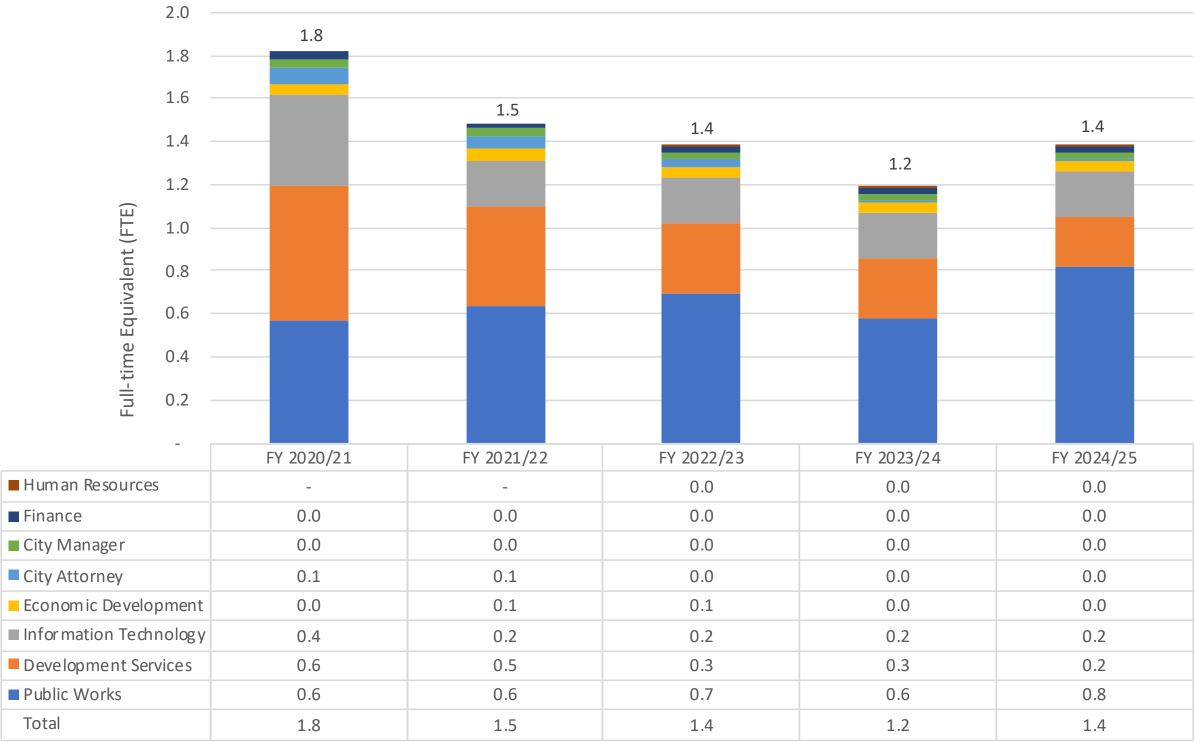


	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
🟧 Existing Programs	0.7	0.3	0.3	0.3	0.3
🟦 New and Expanded Programs	1.1	1.2	1.1	0.9	1.1
Total	1.8	1.5	1.4	1.2	1.4

5.2 Staffing Impact by Department

The San Marcos CAP Implementation Cost Analysis estimated staffing impacts for each department that will participate in CAP implementation to illustrate how workload would be distributed across the San Marcos organizational structure. Public Works would have the highest level of staffing impact with a range of about 0.6 FTE to 0.8 FTE during the first five years. The staffing impact for capital projects is estimated with a conservative approach when Capital projects are required to be completed in year five, the last year of the analysis. Actual staffing allocation depends on available funding and grants received. Development Services would have the next highest staffing impacts with 0.6 FTE in year one declining to 0.2 FTE in year five, which likely reflects the start-up nature of many of the CAP measures. Figure 15 and Table 10 show annual staffing impact by City department.

Figure 15 Annual Direct Staff Impact (FTE) by Department



	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
🟫 Human Resources	-	-	0.0	0.0	0.0
🟦 Finance	0.0	0.0	0.0	0.0	0.0
🟩 City Manager	0.0	0.0	0.0	0.0	0.0
🟦 City Attorney	0.1	0.1	0.0	0.0	0.0
🟨 Economic Development	0.0	0.1	0.1	0.0	0.0
⬜ Information Technology	0.4	0.2	0.2	0.2	0.2
🟧 Development Services	0.6	0.5	0.3	0.3	0.2
🟦 Public Works	0.6	0.6	0.7	0.6	0.8
Total	1.8	1.5	1.4	1.2	1.4

Table 10 Annual Direct Staff Impact (FTE) by Department[5]

Department	**FY 2020/21**	**FY 2021/22**	**FY 2022/23**	**FY 2023/24**	**FY 2024/25**
Public Works	0.6	0.6	0.7	0.6	0.8
Development Services	0.6	0.5	0.3	0.3	0.2
Information Technology	0.4	0.2	0.2	0.2	0.2
Economic Development	0.0	0.1	0.1	0.0	0.0
City Attorney	0.1	0.1	0.0	0.0	0.0
City Manager	0.0	0.0	0.0	0.0	0.0
Finance	0.0	0.0	0.0	0.0	0.0
Human Resources	-	-	0.0	0.0	0.0
Total	**1.8**	**1.5**	**1.4**	**1.2**	**1.4**

---

[5] A value of 0.0 means that the FTE is less than 0.1 but is not zero. A "-" means there is no associated effort.

5.2.1 Staffing Impact by Division

Public Works – Traffic would have the highest level of staff impact. With relatively low impact (0.1 FTE) in year one and then an increase to between 0.3 FTE and 0.4 FTE over the remaining four years (Table 11). Development Services – Planning would have a similar estimated staffing impact of between 0.4 FTE in year one with a steady decline to 0.2 in the final two years. Information Technology would have the next highest with 0.4 FTE in year one and 0.2 FTE in the remaining four years.

Table 11 Annual Direct Staffing Impact (FTE) by Division[6]

Division	**FY 2020/21**	**FY 2021/22**	**FY 2022/23**	**FY 2023/24**	**FY 2024/25**
Public Works - Traffic	0.1	0.4	0.3	0.3	0.3
Development Services - Planning	0.4	0.4	0.3	0.2	0.2
Information Technology	0.4	0.2	0.2	0.2	0.2
Public Works - Parks	0.3	0.2	0.3	0.2	0.2
Public Works - CIP	0.1	0.0	0.0	0.0	0.3
Development Services - Admin	0.2	0.1	0.0	0.0	0.0
Economic Development	0.0	0.1	0.1	0.0	0.0
Public Works - Admin	0.1	0.0	0.0	0.0	0.1
City Attorney	0.1	0.1	0.0	0.0	0.0
City Manager	0.0	0.0	0.0	0.0	0.0
Finance	0.0	0.0	0.0	0.0	0.0
Development Services - Building	0.1	0.0	0.0	0.0	0.0
Development Services - Land Development	0.0	0.0	0.0	0.0	0.0
Human Resources	-	-	0.0	0.0	0.0
Total	**1.8**	**1.5**	**1.4**	**1.2**	**1.4**

5.3 Staffing Impact by Position

The staffing impact to implement CAP activities is concentrated in a handful of positions, though no single position would require greater than 0.4 FTE in a single year. The IT Manager would require 0.4 FTE in the first year, then 0.2 FTE in remaining four years because of Measure T-14 (Transition to online Building and Engineering Permit Submittal System). This position would have the highest single year impact (0.4 FTE). Work on this measure is already in progress and is managed through distributing work to other IT staff. The Principal Planner in the Development Services Planning Division, which is expected to support many CAP measures would require between 0.2 FTE and 0.3 FTE over the first five years of CAP implementation. This position is currently supporting the update to the CAP and is expected to continue to devote between 0.3 FTE and 0.5 FTE to CAP related activities over the first five years of implementation. The Parks Manager in Public Works would have similar requirements to the Principal Planner Position with between 0.2 FTE and 0.3 FTE over the five-year period of this analysis. As can be seen in Table 12, many staff positions that are expected to support CAP implementation would have little to no increase in workload.

---

[6] A value of 0.0 means that the FTE is less than 0.1 but is not zero. A "-" means there is no associated effort.

Table 12 Annual Staffing Impact (FTE) by Position[7,8]

Position	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
IT Manager	0.4	0.2	0.2	0.2	0.2
DS Planning-Principal Planner	0.3	0.3	0.2	0.2	0.2
PW Parks-PW Parks Manager	0.3	0.2	0.3	0.2	0.2
PW TE-Principal Traffic Engineer	0.0	0.2	0.2	0.2	0.2
PW TE-Senior Traffic Engineer	0.1	0.2	0.2	0.2	0.1
PW CIP - Principal CIP Engineer	0.0	0.0	0.0	0.0	0.3
DS Planning-Planning Manager	0.1	0.1	0.0	0.0	0.0
City Attorney	0.1	0.1	0.0	0.0	0.0
DS Admin - DS Director	0.1	0.0	0.0	0.0	0.0
City Manager	0.0	0.0	0.0	0.0	0.0
PW Admin - Fleet Manager	0.0	0.0	0.0	0.0	0.0
DS Admin- DS Admin Manager	0.1	0.0	0.0	0.0	0.0
DS Building- Building Official	0.1	0.0	0.0	0.0	0.0
ED Manager	0.0	0.0	0.0	0.0	0.0
ED Communic. Manager	0.0	0.0	0.0	0.0	0.0
Finance Senior Office Specialist	0.0	0.0	0.0	0.0	0.0
PW Admin - PW Director	0.0	0.0	0.0	0.0	0.0
DS Land Development – Principal Engineer	0.0	0.0	0.0	0.0	0.0
PW CIP- Deputy City Engineer	0.0	0.0	0.0	0.0	0.0
Finance Contracts, Grants & Procurement Manager	0.0	0.0	0.0	0.0	0.0
Finance Director	0.0	0.0	0.0	0.0	0.0
HR Manager	-	-	0.0	0.0	0.0
Fiannce Fiscal Budget Manager	0.0	0.0	0.0	0.0	0.0
HR Director	-	-	-	-	-
Admin-PW Admin Manager	-	-	-	-	-
PW Facilities - Facilities Manager	-	-	-	-	-
Total	**1.8**	**1.5**	**1.4**	**1.2**	**1.4**

5.4 Staffing Impact by Measure

T-14 (Transition to an Online Building and Engineering Permit Submittal System) would have the highest staffing impact of any CAP measure (Table 13). It would require about 0.6 FTE in year one and then level off at about 0.2 FTE for the remaining years. C-1 (Increase Tree Planting at City Parks

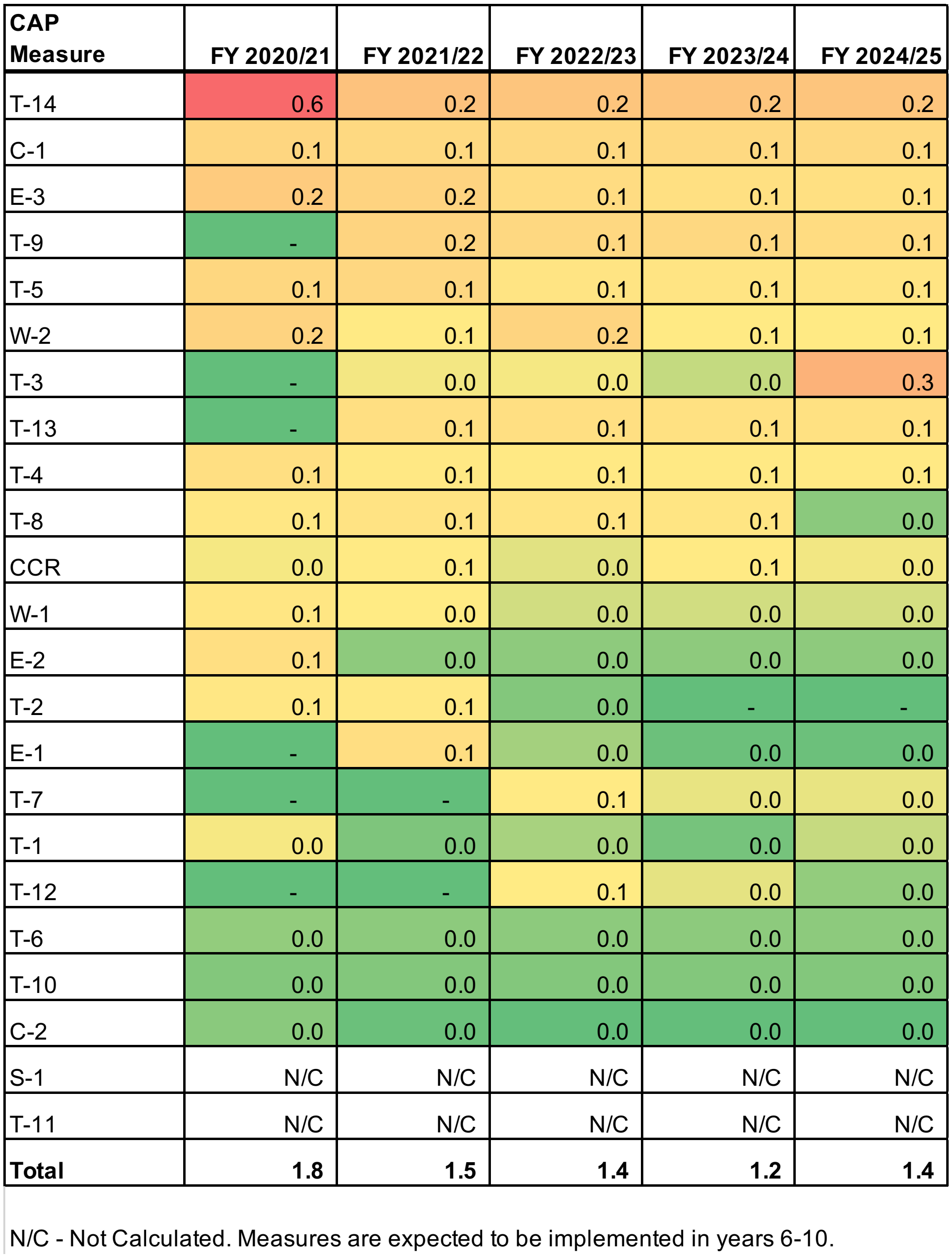
---

[7] A value of 0.0 means that the FTE is less than 0.1 but is not zero. A "-" means there is no associated effort.

[8] Measures S-1 and T-11 would not have any activity in the first five years of implementation.

and Public Rights-of-Way) would have the second highest estimated staffing needs with 0.1 FTE per year.

Table 13 Annual Staffing Impact (FTE) by CAP Measure[9]



CAP Measure	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
T-14	0.6	0.2	0.2	0.2	0.2
C-1	0.1	0.1	0.1	0.1	0.1
E-3	0.2	0.2	0.1	0.1	0.1
T-9	-	0.2	0.1	0.1	0.1
T-5	0.1	0.1	0.1	0.1	0.1
W-2	0.2	0.1	0.2	0.1	0.1
T-3	-	0.0	0.0	0.0	0.3
T-13	-	0.1	0.1	0.1	0.1
T-4	0.1	0.1	0.1	0.1	0.1
T-8	0.1	0.1	0.1	0.1	0.0
CCR	0.0	0.1	0.0	0.1	0.0
W-1	0.1	0.0	0.0	0.0	0.0
E-2	0.1	0.0	0.0	0.0	0.0
T-2	0.1	0.1	0.0	-	-
E-1	-	0.1	0.0	0.0	0.0
T-7	-	-	0.1	0.0	0.0
T-1	0.0	0.0	0.0	0.0	0.0
T-12	-	-	0.1	0.0	0.0
T-6	0.0	0.0	0.0	0.0	0.0
T-10	0.0	0.0	0.0	0.0	0.0
C-2	0.0	0.0	0.0	0.0	0.0
S-1	N/C	N/C	N/C	N/C	N/C
T-11	N/C	N/C	N/C	N/C	N/C
Total	**1.8**	**1.5**	**1.4**	**1.2**	**1.4**

N/C - Not Calculated. Measures are expected to be implemented in years 6-10.

5.5 Staffing Impact by CAP Strategy

Strategy 3 (Reduce Vehicle Miles Traveled) would require the most staff effort with between 0.5 FTE and 0.7 FTE over the five year analysis period (Table 14). This strategy comprises eight measures and 29 implementation actions. Strategy 5 (Increase Renewable and Zero-Carbon Energy) would require the next highest level of staff effort with between 0.3 FTE and 1.1 FTE. This is the only strategy to require a combined staffing effort greater than 1.0 FTE in a single year (1.1 FTE in year five). This is due in part to the staff time required to investigate, establish, and launch a Community Choice Energy program.

---

[9] A value of 0.0 means that the FTE is less than 0.1 but is not zero. A "-" means there is no associated effort.

Table 14 Annual Direct Staff Impact (FTE) by CAP Strategy[10]

Strategy	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
Strategy 3: Reduce Vehicle Miles Traveled	0.7	0.6	0.7	0.6	0.5
Strategy 5: Increase Renewable and Zero-Carbon Energy	0.3	0.2	0.1	0.1	1.1
Strategy 1: Increase Use of Zero-Emission or Alternative Fuel Vehicles	0.2	0.2	0.1	0.1	0.4
Strategy 4: Increase Building Energy Efficiency	0.2	0.3	0.2	0.2	0.2
Strategy 2: Reduce Fossil Fuel use	0.2	0.2	0.1	0.1	0.1
Strategy 6: Reduce Water Use	0.2	0.1	0.2	0.1	0.1
Strategy 8: Increase Urban Tree Cover	0.2	0.1	0.1	0.1	0.1
CAP Coordination and Reporting	0.0	0.1	0.0	0.1	0.0
Strategy 7: Reduce and Recycle Solid Waste	-	-	-	-	-
Total	**2.0**	**1.7**	**1.6**	**1.4**	**2.6**

---

[10] A value of 0.0 means that the FTE is less than 0.1 but is not zero. A "-" means there is no associated effort.

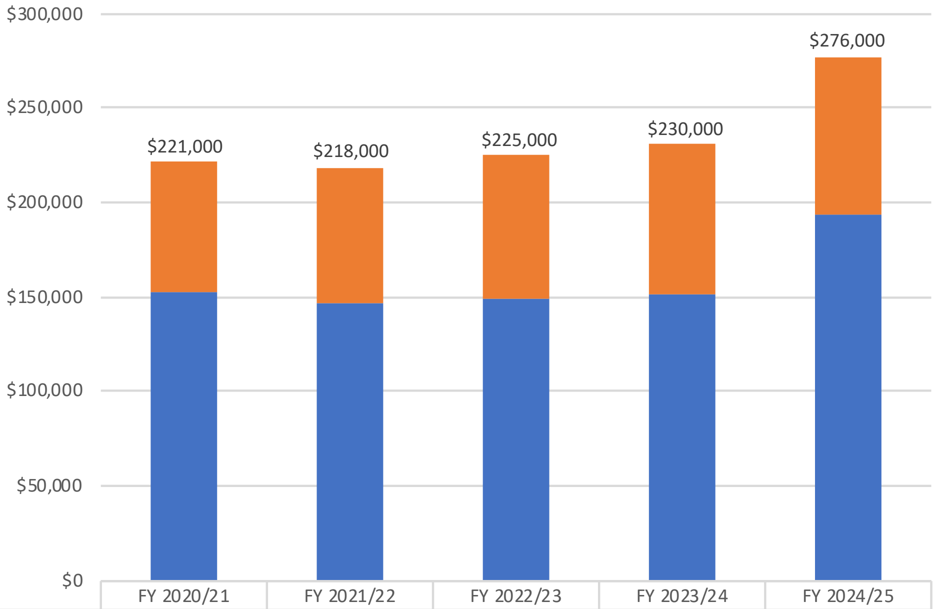
6 SUPPORTING EFFORTS

Previous sections of this report summarized results of the San Marcos CAP Implementation Cost Analysis for activities that directly implement CAP measures. The costs and staffing impacts of supporting efforts, which support multiple CAP measures, may not lead directly to GHG emissions reductions, and may not be implemented, were excluded from these results. This section provides a summary of the estimated costs and staffing impacts associated with the supporting efforts included in the CAP.

6.1 Costs for Supporting Efforts

The total estimated costs over the first five years to implement supporting efforts would be nearly $1.2 million. Annual costs would remain relatively steady between $221,000 to $230,00 during the first four years and rise to $276,000 in year five (Figure 16). About 70% of these costs are associated with new and expanded programs that would not have occurred without CAP adoption.

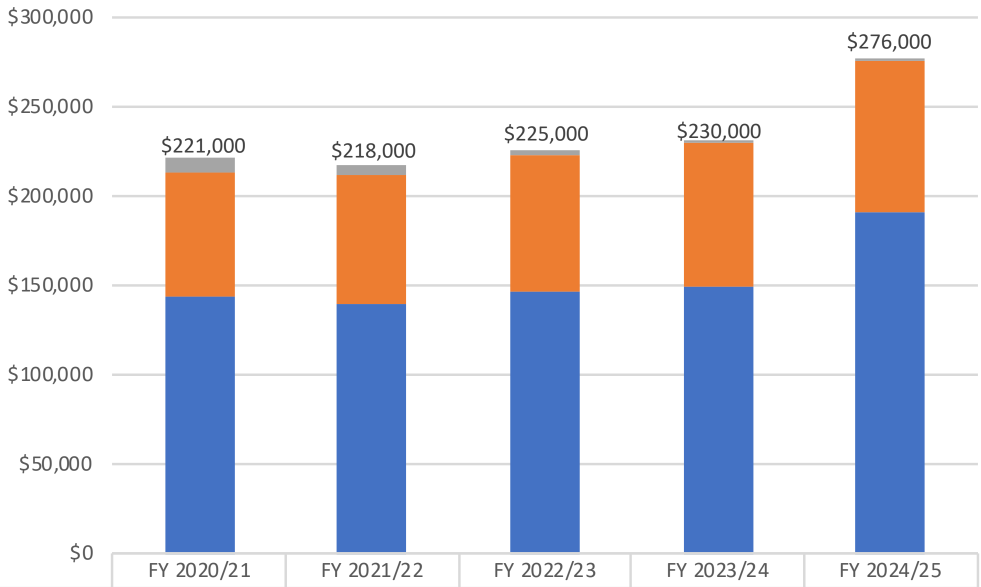
Figure 16 Annual Cost of Supporting Efforts by Program Type



	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
🟧 Existing Programs	$69,000	$72,000	$76,000	$80,000	$84,000
🟦 New and Expanded Programs	$152,000	$146,000	$149,000	$151,000	$193,000
Total	$221,000	$218,000	$225,000	$230,000	$276,000

Similarly, about 65% of estimated costs to implement supporting efforts are unfunded (Figure 17).

Figure 17 Annual Cost of Supporting Efforts by Program and Funding Type



	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
■ New and Expanded - Funded	$8,000	$6,000	$3,000	$2,000	$2,000
🟧 Existing-Funded	$69,000	$72,000	$76,000	$80,000	$84,000
🟦 New and Expanded - Unfunded	$144,000	$139,000	$146,000	$149,000	$191,000
Total	$221,000	$218,000	$225,000	$230,000	$276,000

Supporting efforts can support multiple measures within a CAP strategy. Figure 18 summarizes costs for supporting efforts by strategy. Strategy 8 (Increase Urban Tree Cover) would have the highest estimated costs over five years with $678,000, or nearly 60% of all costs for supporting efforts. These costs supporting efforts:

- Launch a community forestry program with an annual budget of at least $2 per capita and observe an official Arbor Day on yearly basis.
- Continue turf management practices which specify the top-dressing of compost to increase carbon sequestration at City parks.

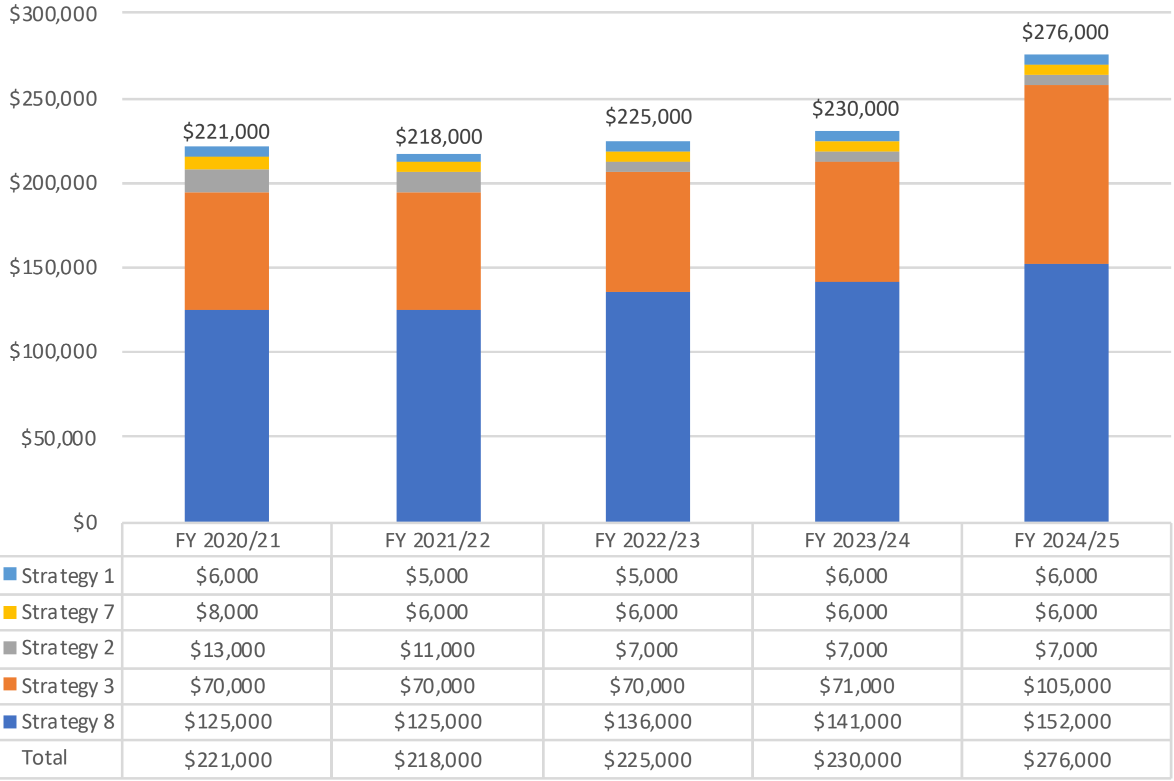
Costs to implement these two supporting efforts would be mostly for materials and supplies. Neither activity contributed to estimated GHG reductions in the draft CAP.

Supporting efforts for Strategy 3 (Reduce Vehicle Miles Traveled) would have estimated costs of $386,000, or about 33% of total supporting efforts. These costs would comprise mostly consultant support and personnel. Three supporting measures account for a significant amount of consulting support:

- Consider development of a neighborhood electric vehicle (NEV) master plan to encourage use of no emission vehicles on appropriate facilities.
- Continue to pursue public and private funding to expand and link the City's bicycle and pedestrian network in accordance with the General Plan-Mobility Element ,and Trails Master Plan.

- Incorporate multi-modal improvements into pavement resurfacing, restriping, and signalization operations where the safety and convenience of users can be improved within the scope of work.

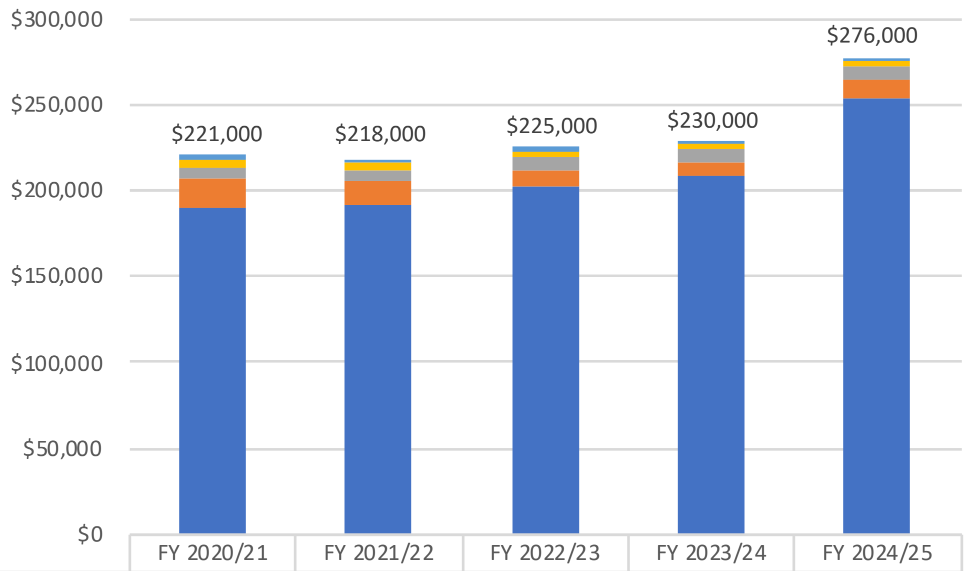
Figure 18 Cost of Supporting Efforts by Strategy



	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
🟦 Strategy 1	$6,000	$5,000	$5,000	$6,000	$6,000
🟨 Strategy 7	$8,000	$6,000	$6,000	$6,000	$6,000
⬜ Strategy 2	$13,000	$11,000	$7,000	$7,000	$7,000
🟧 Strategy 3	$70,000	$70,000	$70,000	$71,000	$105,000
🟦 Strategy 8	$125,000	$125,000	$136,000	$141,000	$152,000
Total	$221,000	$218,000	$225,000	$230,000	$276,000

Consistent with other direct CAP implementation costs, Public Works would have the highest supporting effort costs with just over $1 million over five years (Figure 19). The activities associated with Strategy 8 contribute to this total.

Figure 19 Cost for Supporting Efforts by Department



	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
🟦 Finance	$3,000	$2,000	$2,000	$2,000	$1,000
🟨 City Manager	$5,000	$4,000	$4,000	$3,000	$3,000
⬜ Economic Development	$6,000	$7,000	$7,000	$7,000	$8,000
🟧 Development Services	$17,000	$13,000	$9,000	$9,000	$10,000
🟦 Public Works	$190,000	$192,000	$203,000	$208,000	$254,000
Total	$221,000	$218,000	$225,000	$230,000	$276,000

Materials and supplies would account for about 45% of supporting effort costs, followed by personnel (33%), and consultants (22%). No capital expenditures would be required for supporting efforts. Annual costs by expenditure type would remain relatively steady over the first five years of CAP implementation. Figure 20 and Figure 21 present these findings.

Figure 20 Total Costs for Supporting Efforts Broken Down by Expenditure Category

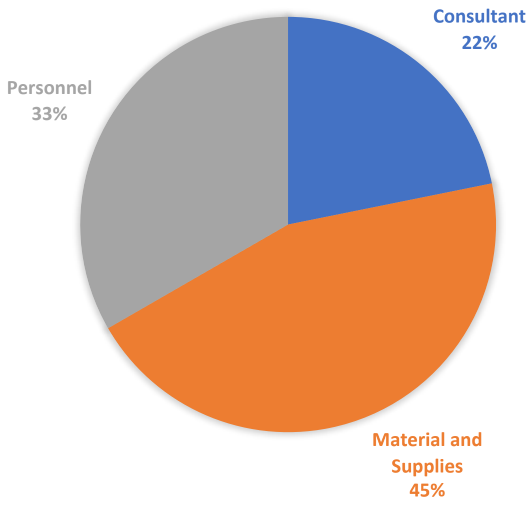
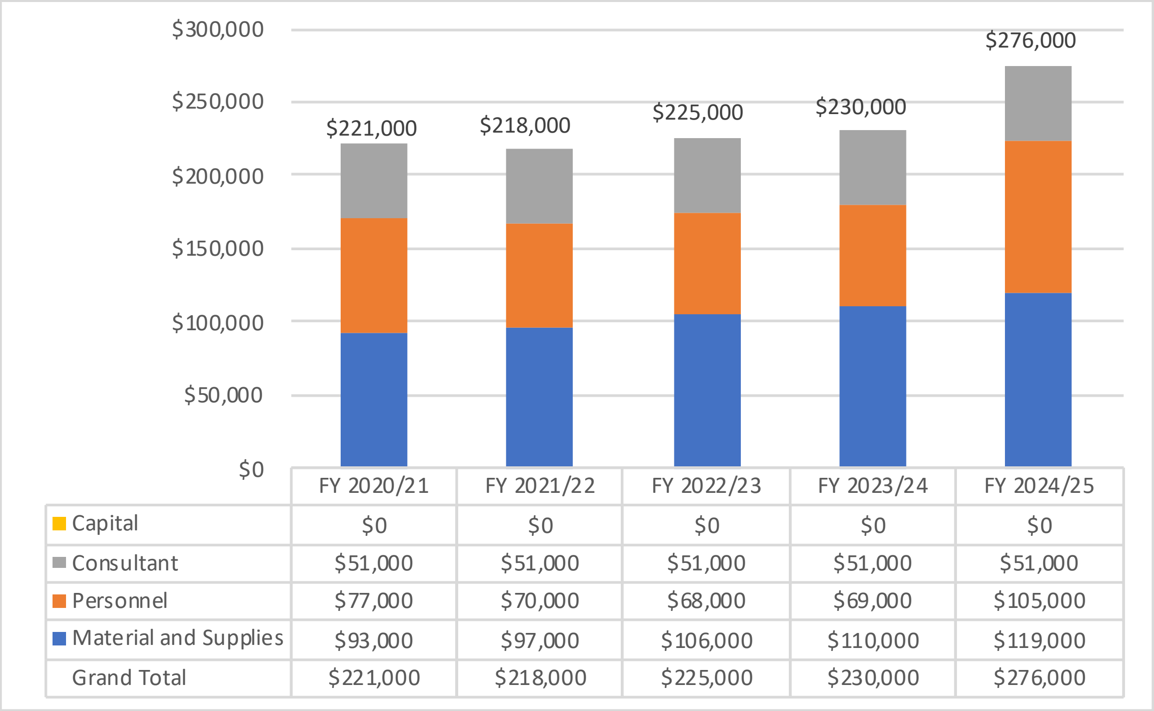


Figure 21 Annual Supporting Effort Costs by Expenditure Category

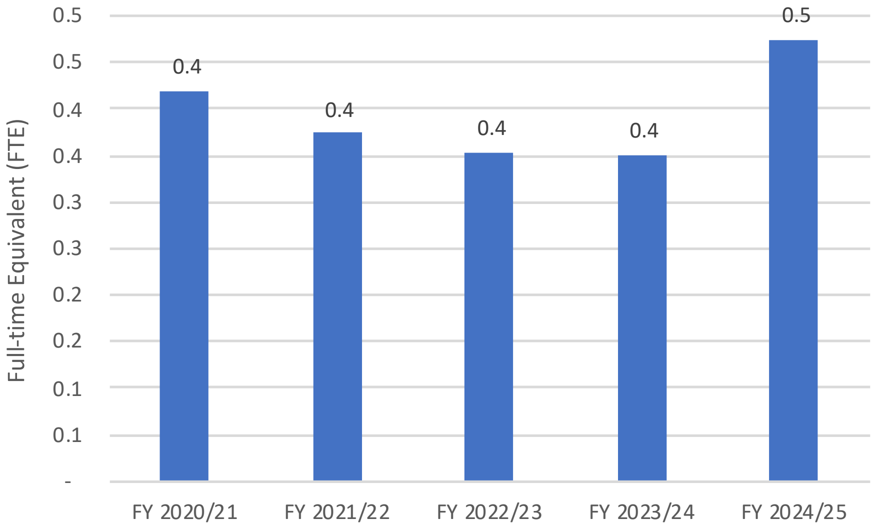


	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
🟨 Capital	$0	$0	$0	$0	$0
◼ Consultant	$51,000	$51,000	$51,000	$51,000	$51,000
🟧 Personnel	$77,000	$70,000	$68,000	$69,000	$105,000
🟦 Material and Supplies	$93,000	$97,000	$106,000	$110,000	$119,000
Grand Total	$221,000	$218,000	$225,000	$230,000	$276,000

6.2 Staffing Impact for Supporting Efforts

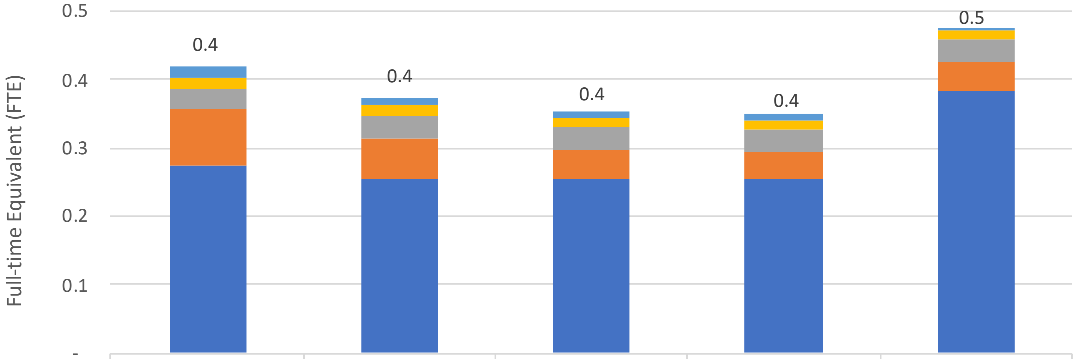
As noted above, about 33% of supporting effort costs would be associated with personnel. Staffing impacts for supporting efforts over the five-year period, measured in FTE, represent between 25% and 35% of total FTE to implement all CAP activities. Related staffing effort ranges between 0.4 FTE and 0.5 FTE over the five years (Figure 22).

Figure 22 Annual Staffing Impact (FTE) to Implement Supporting Measures



Public Works would require the most staff effort to implement CAP supporting measures, ranging from 0.3 FTE in the first four years to 0.4 in the final year of the analysis period (Figure 23).

Figure 23 Annual Staffing Impact (FTE) to Implement Supporting Measures by Department[11]



	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24	FY 2024/25
🟦 Finance	0.0	0.0	0.0	0.0	0.0
🟨 City Manager	0.0	0.0	0.0	0.0	0.0
⬜ Economic Development	0.0	0.0	0.0	0.0	0.0
🟧 Development Services	0.1	0.1	0.0	0.0	0.0
🟦 Public Works	0.3	0.3	0.3	0.3	0.4
Total	0.4	0.4	0.4	0.4	0.5

Supporting efforts related to Strategies 3 and 8 would have the highest staffing impact, with about 0.1 FTE over the first five years (Table 15). Strategy 3 supporting efforts would require about 0.2 FTE in the final year of the initial timeline.

---

[11] A value of 0.0 means that the FTE is less than 0.1 but is not zero.

Table 15 Annual Staffing Impact (FTE) to Implement Supporting Measure by Strategy

Strategy	**FY 2020/21**	**FY 2021/22**	**FY 2022/23**	**FY 2023/24**	**FY 2024/25**
Strategy 3: Reduce Vehicle Miles Traveled	0.1	0.1	0.1	0.1	0.2
Strategy 8: Increase Urban Tree Cover	0.1	0.1	0.1	0.1	0.1
Strategy 2: Reduce Fossil Fuel use	0.1	0.1	0.0	0.0	0.0
Strategy 1: Increase Use of Zero-Emission or Alternative Fuel Vehicles	0.0	0.0	0.0	0.0	0.0
Strategy 7: Reduce and Recycle Solid Waste	0.0	0.0	0.0	0.0	0.0
Total	**0.4**	**0.4**	**0.4**	**0.4**	**0.5**

7 LIMITATIONS

There are inherent limitations with any data analysis that result in a degree of uncertainty. This implementation cost and staffing impact analysis uses the best information, data, and methods available at the time. Nonetheless, the following limitations should be considered.

7.1 Preliminary Estimate

The cost and staffing impact results presented are preliminary estimates. Because there is limited information about the specific tasks that would be required to implement the CAP measures, the estimates included are based on assumptions about the work to be performed. Over time, the specific tasks required to implement final CAP measures will become clearer and considerations for how to coordinate and sequence activities can be made, which may also affect the ultimate cost and staffing required to implement the final CAP.

7.2 CAP Time Horizon

This analysis evaluated San Marcos' cost and staffing impact (FTE) for the first five years of CAP implementation through FY 24–25. While the CAP has an implementation horizon of 2030 this report does not estimate costs between FY 25–26 and 2030. It would be too speculative to determine specific tasks and staffing needs for implementation activities beyond year five. It should be noted that certain CAP measures will be implemented and will have costs beyond the scope of this initial cost analysis. To account for future costs, the City can conduct cost analysis as part of the CAP monitoring and update process.

7.3 Cost Savings not Considered

This report estimates costs that will be incurred by the City of San Marcos to implement the measures included in the CAP. It does not consider any potential benefits/cost savings that might result from those measures. For example, rooftop solar and energy efficiency retrofits have an upfront cost but could result in a net savings over the project lifetime. A benefit-cost analysis would be required to estimate the net savings or costs that would accrue to San Marcos for municipal projects, and residents, and businesses located within the City.

7.4 GHG Emissions

This report does not consider the GHG emissions associated with CAP measures. It is common for cost analyses to normalize cost across GHG emission reductions in a CAP; this means dividing costs by GHG emissions to derive a cost per ton of carbon-dioxide equivalent (CO_2e) reduced. It is not possible to derive such values from the cost information included in this report, because there is no way to correlate the amount of GHG reductions that would occur due to the specific staffing expenditures estimated for this effort. For example, it would not be accurate to divide costs for the first five fiscal years by the total GHG reduction for 2030, as there could be additional costs associated with achieving those reductions.

APPENDIX A FUNDING OPPORTUNITIES

Below is a preliminary list of possible funding opportunities to assist with CAP implementation organized by GHG emissions category and by responsible agency or organization.

A.1. On-Road Transportation

A.1.1. California Air Resources Board

Advanced Technology Demonstration and Pilot Projects

Grants for pre-commercial demonstrations of advanced vehicles, engines, equipment, and transportation systems. (Website)

Air Quality Improvement Program (AQIP)

The Air Quality Improvement Program (AQIP) provide mobile source incentives to reduce greenhouse gas, criteria pollutant, and toxic air contaminant emissions through the deployment of advanced technology and clean transportation in the light-duty and heavy-duty sectors. The Air Quality Improvement Program (AQIP) was established by the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007 (AB 118, Statutes of 2007, Chapter 750). Each year, the legislature appropriates funding to CARB for these incentives to reduce emissions and support advanced technology demonstrations and deployments. The AQIP Guidelines and annual Funding Plans guide CARB's implementation of these investments. For more information on clean transportation projects, incentives, and financing, please visit Moving California. (Website)

Carl Moyer Program

The Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) provides grant funding for cleaner-than-required engines, equipment, and other sources of air pollution. The Carl Moyer Program is implemented as a partnership between CARB and California's 35 local air districts. CARB works collaboratively with the air districts and other stakeholders to set Guidelines and ensure the Program reduces pollution and provides cleaner air for Californians.

Public and private entities can apply for Moyer funding. In order to receive funds projects must not be required by any regulation, memorandum of understanding, or other legal mandate but must be "early or extra." Under Moyer Program Guidelines, fund recipients sign a contract and submit basic project status information on a regular basis. Small businesses with vehicles or equipment that are exempt from or not yet subject to air quality rules are particularly encouraged to apply. (Website)

Clean Truck and Bus Vouchers

This program provides vouchers for the purchase of zero-emission, hybrid, and low-emissions trucks and buses. (Website)

Clean Vehicle Rebate Project (CVRP)

The Clean Vehicle Rebate Project (CVRP) provides up to $7,000 to purchase or lease a new plug-in hybrid electric vehicle (PHEV), battery electric vehicle (BEV), or a fuel cell electric vehicle (FCEV). CVRP offers vehicle rebates on a first-come, first-served basis and helps get the cleanest vehicles on the road in California by providing consumer rebates to reduce the initial cost of advanced technologies. Rebates are available to California residents that meet income requirements and purchase or lease an eligible vehicle. (Website)

Community Air Protection

The Community Air Protection program provided funding for projects focused on the communities most burdened by air pollution. Funds cleaner vehicles, equipment, charging infrastructure for heavy vehicles, projects that reduce air toxics from smaller stationary sources, and projects from AB 617. This program is administered by local Air Districts. (Website)

Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project

The California Air Resources Board (CARB), in partnership with CALSTART, launched the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) to accelerate the adoption of cleaner, more-efficient trucks and buses. HVIP works directly with dealers to apply the voucher incentive at the time of purchase. (Website)

Low Carbon Transportation Investments Program

Low Carbon Transportation Investments provides mobile source incentives to reduce greenhouse gas, criteria pollutant, and toxic air contaminant emissions through the deployment of advanced technology and clean transportation in the light-duty and heavy-duty sectors. Low Carbon Transportation Investments are supported by Cap-and-Trade auction proceeds. Each year, the legislature appropriates funding to CARB for these incentives to reduce emissions and support advanced technology demonstrations and deployments. (Website)

Lower-Emission School Bus Program

The Lower-Emission School Bus Program (LESBP) provides public funds to California public school districts to replace old, diesel school buses with cleaner buses. (Website)

Sustainable Transportation Equity Project (STEP)

The Program makes $2 million available for planning and capacity building grants. Funding is intended to help low-income and disadvantaged communities identify residents' transportation needs and prepare to implement clean transportation and land use projects. The Program makes $20 million available for one to three implementation block grants to fund clean transportation and land use projects in disadvantaged communities. Funded projects will work together to increase community residents' access to key destinations so they can get where they need to go without the use of a personal vehicle. (Website)

Truck Loan Assistance Program

The Truck Loan Assistance Program helps small-business fleet owners affected by CARB's In-Use Truck and Bus regulation to secure financing for upgrading their fleets with newer trucks. (Website)

A.1.2. California Energy Commission

Clean Transportation Program - Biofuels: Biomethane, Diesel Substitutes, Gasoline Substitutes

The California Energy Commission supports California's transition to biofuels such as biomethane, diesel substitutes, and gasoline substitutes through investments in biofuel production and demonstration. The Energy Commission also supports development of technologies to produce these fuels from a variety of raw materials, called feedstocks, as well as the fueling infrastructure for these alternative fuels. (Website)

Clean Transportation Program - Electric Vehicles & Charging Infrastructure

The California Energy Commission is investing in the charging infrastructure and technologies that are helping to drive the transition to clean, zero-emission electric vehicles throughout the state. The Energy Commission is also supporting strategic regional planning to support adoption of these vehicles. (Website)

Clean Transportation Program - Hydrogen Vehicles & Refueling Infrastructure

The California Energy Commission is supporting the adoption of zero-emission hydrogen fuel cell electric cars by expanding California's network of hydrogen refueling stations throughout the state. The Energy Commission is investing in an initial network of 100 public hydrogen stations across California to support the fuel cell electric cars that are on the road now, and to encourage more consumers to consider these zero-emission vehicles. (Website)

Clean Transportation Program - Medium and Heavy-Duty Vehicles

The California Energy Commission is investing in projects throughout California that accelerate advancement and adoption of medium- and heavy-duty vehicle technologies that produce zero or near-zero emissions. The program also invests in fueling stations for public and fleet vehicles that support the accelerated deployment of these vehicles. (Website)

Clean Transportation Program - Natural Gas Vehicles & Refueling Infrastructure

The Energy Commission supports projects that demonstrate in-state production of renewable natural gas or biomethane, which can be substituted for conventional natural gas in natural gas vehicles. When powered by biomethane, low-NOx engines can reduce criteria pollutant and greenhouse gas emissions. (Website)

Clean Transportation Program - Workforce Development

To meet the need for a skilled workforce in the state's growing clean transportation and fuels market, the California Energy Commission supports manufacturing and workforce training and development, working with a variety of public and private partners. (Website)

School Bus Replacement

The School Bus Replacement Program offers funds to replace old diesel school buses in disadvantaged and low-income communities throughout California. The California Energy Commission is helping schools embrace next-generation zero-emission vehicles and improve children's health by reducing their exposure to transportation-related air pollution. (Website)

A.1.3. California Department of Housing and Community Development (HCD)

Infill Infrastructure Grant Program

The Infill Infrastructure Grant Program (IIG) provides grant assistance as gap funding to infrastructure improvements required for specific residential or mixed-use infill development. Funds will be allocated through a competitive process for Large Jurisdictions, based on the merits of the individual infill projects and areas. Application selection criteria includes housing density, project readiness, access to transit, proximity to amenities, and housing affordability. (Website)

A.1.4. California Department of Transportation (CALTRANS)

Active Transportation Program - SB99

Annual program providing state funds for city and county projects that improve safety and convenience for bicycle commuters, including, but not limited to, any of the following: New bikeways serving major transportation corridors; New bikeways removing travel barriers to potential bicycle commuters; Secure bicycle parking at employment centers, park-and-ride lots, rail and transit terminals, and ferry docks and landings; Bicycle-carrying facilities on public transit vehicles; Installation of traffic control devices to improve the safety and efficiency of bicycle travel; Elimination of hazardous conditions on existing bikeways; Planning; Improvement and maintenance of bikeways; Project planning; Preliminary engineering; Final design; Right of way acquisition; Construction engineering; and Construction and/or rehabilitation. (Website)

Local Assistance Program

Caltrans' Local Assistance Program oversees more than one billion dollars annually available to over 600 cities, counties and regional agencies for the purpose of improving their transportation infrastructure or providing transportation services. This funding comes from various Federal and State programs specifically designed to assist the transportation needs of local agencies. Annually, over 1,200 new projects are authorized through the Local Assistance Program of which approximately 700 are construction projects. (Website)

Low Carbon Transit Operations Program (LCTOP)

The LCTOP was created to provide operating and capital assistance for transit agencies to reduce greenhouse gas emission and improve mobility, with a priority on serving disadvantaged communities. Approved projects in LCTOP will support new or expanded bus or rail services, expand intermodal transit facilities, and may include equipment acquisition, fueling, maintenance and other costs to operate those services or facilities, with each project reducing greenhouse gas emissions. For agencies whose service area includes disadvantaged communities, at least 50 percent of the total moneys received shall be expended on projects that will benefit disadvantaged communities. Senate Bill 862 continuously appropriates five percent of the annual auction proceeds in the Greenhouse Gas Reduction Fund (Fund) for LCTOP, beginning in 2015-16.

This program will be administered by the California Department of Transportation (Caltrans) in coordination with Air Resource Board (ARB) and the State Controller's Office (SCO). Caltrans is responsible to ensure that the statutory requirements of the program are met in terms of project eligibility, greenhouse reduction, disadvantaged community benefit, and other requirements of the law. (Website)

State Highway Operations and Protection Program (SHOPP)

The Office of SHOPP Management is responsible for planning, developing, managing and reporting the four-year SHOPP portfolio of projects. The Program is the State Highway System's "fix it first" program that funds repairs and preservation, emergency repairs, safety improvements, and some highway operational improvements on the State Highway System. (Website)

Strategic Partnership Grants

This program includes $4.5 million to identify and address statewide, interregional, or regional transportation deficiencies on the State highway system in partnership with Caltrans. A sub-category funds transit-focused planning projects that address multimodal transportation deficiencies. (Website)

Sustainable Communities Planning Grants

The program includes $29.5 million to encourage local and regional planning that furthers state goals, including, but not limited to, the goals and best practices cited in the Regional Transportation Plan Guidelines adopted by the California Transportation Commission. (Website)

Transit and Intercity Rail Capital Program (TIRCP)

The TIRCP provides grants from the Greenhouse Gas Reduction Fund (GGRF) to fund transformative capital improvements that will modernize California's intercity, commuter, and urban rail systems, and bus and ferry transit systems, to significantly reduce emissions of greenhouse gases, vehicle miles traveled, and congestion. (Website)

A.1.5. California Transportation Commission

Local Partnership Program (LPP)

The primary objective of this program is to provide funding to counties, cities, districts, and regional transportation agencies in which voters have approved fees or taxes dedicated solely to transportation improvements or that have imposed fees, including uniform developer fees, dedicated solely to transportation improvements. Funding includes $200M/year to improve aging Infrastructure, Road Conditions, Active Transportation, Transit and rail, Health and Safety Benefits. (Website)

Local Streets and Roads (LSR) Program

The purpose of the program is to provide approximately $1.5 billion per year to cities and counties for basic road maintenance, rehabilitation, and critical safety projects on the local streets and roads system. (Website)

Solutions for Congested Corridors

The purpose of the program is to provide funding to achieve a balanced set of transportation, environmental, and community access improvements to reduce congestion throughout the state. This statewide, competitive program makes $250 million available annually for projects that implement specific transportation performance improvements and are part of a comprehensive corridor plan by providing more transportation choices while preserving the character of local communities and creating opportunities for neighborhood enhancement. (Website)

State Transportation Improvement Program (STIP)

The STIP is the biennial five-year plan adopted by the Commission for future allocations of certain state transportation funds for state highway improvements, intercity rail, and regional highway and transit improvements. Local agencies should work through their Regional Transportation Planning Agency (RTPA), County Transportation Commission, or Metropolitan Planning Organization (MPO), as appropriate, to nominate projects for inclusion in the STIP. (Website)

A.1.6. Federal Transportation Administration

Access and Mobility Partnership Grants

Access and Mobility Partnership Grants seek to improve access to public transportation by building partnerships among health, transportation and other service providers. This program provides competitive funding to support innovative projects for the transportation disadvantaged that will improve the coordination of transportation services and non-emergency medical transportation services. In 2018, there are two funding opportunities under the initiative: the Innovative Coordinated Access and Mobility (ICAM) Pilot Program and Human Services Coordination Research (HSCR) grants. (Website)

Better Utilizing Investments to Leverage Development (BUILD) Transportation Grants Program (formerly TIGER)

U.S. DOT’s Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program funds investments in transportation infrastructure, including transit. BUILD Transportation grants replace the Transportation Investment Generating Economic Recovery (TIGER) grant program. (Website)

Helping Obtain Prosperity for Everyone Program

Helping Obtain Prosperity for Everyone (HOPE) Program supports projects that will address the transportation challenges faced by areas of persistent poverty. HOPE supports planning, engineering and technical studies or financial planning to improve transit services in areas experiencing long-term economic distress. It will also support coordinated human service transportation planning to improve transit service or provide new services such as rides to opioid abuse recovery and treatment. (Website)

Integrated Mobility Innovation

FTA's Integrated Mobility Innovation (IMI) Program funds projects that demonstrate innovative and effective practices, partnerships and technologies to enhance public transportation effectiveness, increase efficiency, expand quality, promote safety and improve the traveler experience. (Website)

Low or No Emission Vehicle Program - 5339(c)

The Low or No Emission competitive program provides funding to state and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses as well as acquisition, construction, and leasing of required supporting facilities. (Website)

Mobility for All Pilot Program Grants

This funding opportunity seeks to improve mobility options through employing innovative coordination of transportation strategies and building partnerships to enhance mobility and access to vital community services for older adults, individuals with disabilities, and people of low income. (Website)

Mobility on Demand (MOD) Sandbox Demonstration Program - 5312

Funds projects that promote innovative business models to deliver high quality, seamless and equitable mobility options for all travelers. (Website)

Pilot Program for Transit-Oriented Development Planning – Section 20005(b)

The Pilot Program for TOD Planning helps support FTA's mission of improving public transportation for America's communities by providing funding to local communities to integrate land use and transportation planning with a new fixed guideway or core capacity transit capital investment. Comprehensive planning funded through the program must examine ways to improve economic development and ridership, foster multimodal connectivity and accessibility, improve transit access for pedestrian and bicycle traffic, engage the private sector, identify infrastructure needs, and enable mixed-use development near transit stations. (Website)

A.1.7. California Office of Traffic Safety

Office of Traffic Safety Grant Program

The Program provides annual funds to prevent serious injury and death resulting from motor vehicle crashes so that all roadway users arrive at their destination safely. Funds can be used for bicycle and pedestrian safety. (Website)

A.1.8. San Diego Association of Governments (SANDAG)

Active Transportation Grant Program

The goal of the ATGP is to encourage local jurisdictions to plan and build facilities that promote multiple travel choices and increase connectivity to transit, schools, retail centers, parks, work, and other community gathering places. The grant program also encourages local jurisdictions to provide bike parking, education, encouragement, and awareness programs that support pedestrian and bike infrastructure. SANDAG makes available the grant applications of projects funded through the ATGP. (Website)

Environmental Mitigation Program

The TransNet Extension Ordinance and Expenditure Plan, approved countywide by voters in November 2004, includes an Environmental Mitigation Program (EMP) which is a funding allocation category for the costs to mitigate habitat impacts for regional transportation projects. The EMP is a unique component of the TransNet Extension in that it goes beyond traditional mitigation for transportation projects by including a funding allocation for habitat acquisition, management, and monitoring activities as needed to help implement the Multiple Species Conservation Program and the Multiple Habitat Conservation Program. (Website)

Smart Growth Incentive Program

The SGIP provides funding for transportation-related infrastructure improvements and planning efforts that support smart growth development in Smart Growth Opportunity Areas as shown on the Smart Growth Concept Map (updated May 2016). The goal is to fund comprehensive public infrastructure projects and planning activities that facilitate compact, mixed-use, transit-oriented development and increase housing and transportation choices. SANDAG makes available the grant applications of projects funded through the SGIP. (Website)

Specialized Transportation Grant Program

The SANDAG Specialized Transportation Grant Program (STGP) funds projects and programs that expand mobility options for seniors and individuals with disabilities. (Website)

A.1.9. San Diego Gas & Electric (SDG&E)

Medium/Heavy-Duty Electric Vehicle Charging Infrastructure Program (MD/HD)

Make-ready Electric Vehicle charging infrastructure program to support class 2 - 8 on/off-road electric vehicles. 3,000 vehicles/300 sites over 5 years through 2024. Includes a Vehicle to Grid school bus pilot. Charging station rebates available for qualified customers. Projects must procure at least 2 EVs; operate & maintain charging equipment for at least 10 years; provide charging data for at least 5 years; Provide an easement; Agree to program terms & conditions; Procure EV charging station from approved vendor list. (Website)

A.1.10. Strategic Growth Council (and partners)

Transformative Climate Communities (TCC) Program

The Program funds community-led development and infrastructure projects that achieve major environmental, health, and economic benefits in California’s most disadvantaged communities. (Website)

Affordable Housing and Sustainable Communities (AHSC)

The Program funds land-use, housing, transportation, and land preservation projects to support infill and compact development that reduce greenhouse gas emissions. (Website)

A.1.11. Other

Community Grant

The PeopleForBikes Community Grant Program supports bicycle infrastructure projects and targeted advocacy initiatives that make it easier and safer for people of all ages and abilities to ride. Eligible projects include: Bike paths, lanes, trails, and bridges; Mountain bike facilities; Bike parks and pump tracks; BMX facilities, End-of-trip facilities such as bike racks, bike parking, bike repair stations and bike storage. (Website)

A.2. Energy

A.2.1. California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA)

Qualified Energy Conservation Bonds

These bonds are designed to provide low-interest financing to promote the use of alternative energy and energy efficiency in State, Local, and Tribal Government facilities. Up to 30% of each state's allocation may be used for eligible projects that are privately owned or operated. The term is likely to be at least 10 years long based on similar programs with the borrower making one principal plus interest payment annually. (Website)

A.2.2. California Conservation Corps

Energy Corps

The Energy Corps helps schools and public agencies save energy. Trained Corpsmembers conduct energy surveys and lighting and control retrofits in public buildings. Funding from the Greenhouse Gas Reduction Fund enables the Energy Corps to offer these services at an economical rate. With locations in Norwalk, Fresno, Vista, and Sacramento, the Energy Corps accepts requests for service on a rolling basis. (Website)

A.2.3. California Department of Community Services & Development (CSD)

Low-Income Home Energy Assistance Program (LIHEAP)

The Low-Income Home Energy Assistance Program (LIHEAP) provides assistance to eligible low-income households with the goal of managing and meeting their immediate home heating and/or cooling needs. (Website)

Low-Income Weatherization Program (LIWP)

CSD's energy efficiency and weatherization programs provide home energy efficiency upgrades and health and safety improvements to qualifying low-income households. To learn more about eligibility requirements and inquire about available services in your area, please contact your local low-income energy services provider. (Website)

Multi-Family Energy Efficiency and Renewables

Incentives for energy-efficiency measures and solar photovoltaics in low-income multifamily dwellings, especially in disadvantaged communities. (Website)

A.2.4. California Energy Commission

Bright Schools Program

The Bright Schools Program offers services to help identify the most cost-effective energy saving opportunities for schools. The California Energy Commission is helping implement measures that help schools save money. (Website)

Energy Conservation Assistance Act – Low-Interest Loans

The California Energy Commission's Energy Conservation Assistance Act (ECAA) program provides 1 percent interest loans to cities, counties, special districts, public colleges and universities, public care institutions, and public hospitals. Loans finance energy efficiency and energy generation projects. The maximum loan is $3 million. (Website)

Energy Conservation Assistance Act – Zero-Interest Loans for Schools

The California Energy Commission's Energy Conservation Assistance Act – Education (ECAA-Ed) program provides competitive zero-interest rate loans to public school districts, charter schools, county offices of education, and state special schools. Loans finance energy efficiency and energy generation projects. The maximum loan is $3 million. (Website)

Energy Conservation Assistance Act Low-Interest Loans

The California Energy Commission's Energy Conservation Assistance Act (ECAA) program provides 1 percent interest loans to cities, counties, special districts, public colleges and universities, public care institutions, and public hospitals. Loans finance energy efficiency and energy generation projects. The maximum loan is $3 million. (Website)

Energy Efficiency Financing for Public Sector Projects

Cities, counties, public care institutions, public hospitals, public schools and colleges, and special districts in California can apply for low-interest loans from the California Energy Commission for energy efficiency projects in their buildings and facilities. Residential and commercial projects and non-profit institutions are not eligible for these funds. Entities eligible for 0% loans include: School districts, Charter schools, County offices of education, State special schools, Community college districts. Entities eligible for 1% loans include: Cities, Counties, and Special Districts. (Website)

Energy Partnership Program

The California Energy Commission's Energy Partnership Program offers services to help identify the most cost-effective, energy-saving opportunities for buildings and new construction. Cost-saving measures are needed with shrinking budgets and increasing operating costs. Reducing energy costs is one way to save money. (Website)

Local Government Challenge Program

The Local Government Challenge is a partnership between the California Energy Commission (CEC) and local governments to develop innovative solutions that will improve energy performance in California's communities. The CEC has awarded more than $10 million in two competitive grant programs. (Website)

A.2.5. California Infrastructure and Economic Development Bank (Ibank)

California Lending for Energy and Environmental Needs (CLEEN) Center through IBank

The CLEEN Center provides direct public financing to Municipalities, Universities, Schools and Hospitals (MUSH) to help meet the State's goals for greenhouse gas emissions reduction, water conservation and environmental conservation. Financing can be funded via a combination of a direct loan from IBank or public market tax-exempt bonds in amounts from $50 thousand to $30 million (or higher with board approval). (Website)

A.2.6. California Public Utilities Commission (CPUC)

California Solar Initiative - Thermal Program (CSI-Thermal)

The California Solar Initiative (CSI) is the solar rebate program for California consumers that are customers of the investor-owned utilities - Pacific Gas and Electric (PG&E), Southern California Edison (SCE), San Diego Gas & Electric (SDG&E). Together with the rebate program for New Solar Homes and rebate programs offered through the dozens of publicly owned utilities in the state - the CSI program is a key component of the Go Solar California campaign for California. (Website)

California Solar Initiative: Single-Family Affordable Solar Housing (SASH) Program

The SASH program, which provides solar incentives to single-family low-income housing, is administered through GRID Alternatives. (Website)

Electric Program Investment Challenge (EPIC) Program

The California Energy Commission’s Electric Program Investment Charge (EPIC) program invests in scientific and technological research, development, and demonstration to accelerate the transformation of the electricity sector to meet the state’s energy and climate goals. (Website)

Self-Generation Incentive Program

The CPUC's Self-Generation Incentive Program (SGIP) provides incentives to support existing, new, and emerging distributed energy resources. SGIP provides rebates for qualifying distributed energy systems installed on the customer's side of the utility meter. Qualifying technologies include wind turbines, waste heat to power technologies, pressure reduction turbines, internal combustion engines, microturbines, gas turbines, fuel cells, and advanced energy storage systems. (Website)

California Solar Initiative: Multi-Family Affordable Solar Housing (MASH) Program

The MASH Program provided solar incentives on qualifying affordable housing multifamily dwellings. MASH is the low-income, multifamily component within the California Solar Initiative program. (Website)

California Solar Initiative: Thermal Program

The CSI-Thermal program provides rebates to utility customers who install solar thermal systems to replace water-heating systems powered by electricity or natural gas. (Website)

California Solar Initiative: Thermal Low-income Program

The CSI-Thermal Low-Income Program provides rebates to qualifying utility customers who install solar water heating (SWH) systems that displace natural gas usage. (Website)

A.2.7. San Diego Gas & Electric (SDG&E)

Non-Residential On-Bill Financing Program

The SDG&E On-Bill Financing (OBF) program offers qualified business customers 0% financing from $5,000 to $100,000 per meter for qualifying equipment. All institutional customers may receive from $5,000 to $250,000 per meter. On-Bill Financing is available to any commercial or government-funded customer participating in an energy efficiency rebate or incentive program. The program is open to all non-residential customers, including owners of multi-family units who do not live on premises. Participants must have had an active account for the past two years and good credit standing as determined by the Utility. The funds may be used for a wide variety of efficiency improvement projects, and the monthly loan payments will be added directly to the customer's bill. (Website)

A.2.8. U.S. Department of Energy

Educational Materials for Professional Organizations Working on Efficiency and Renewable Energy Developments (EMPOWERED)

The Educational Materials for Professional Organizations Working on Efficiency and Renewable Energy Developments (EMPOWERED) funding program is a collaborative effort across EERE's Solar Energy Technologies Office (SETO), Vehicle Technologies Office (VTO), and Building Technologies Office (BTO), to provide professionals with educational materials and training resources in fields newly interacting with distributed energy resources (DER). In this program, DER includes distributed solar, like on homes and businesses, as well as efficient building technologies and sustainable transportation technologies, such as electric vehicles. (Website)

A.3. Solid Waste

A.3.1. California Department of Resources and Recycling (CalRecycle)

Beverage Container Recycling City/County Payment Program

The Department of Resources Recycling and Recovery (CalRecycle) administers a program to provide opportunities for beverage container recycling. The goal of this program is to reach and maintain an 80 percent recycling rate for all California refund value beverage containers--aluminum, glass, plastic and bi-metal. Projects implemented by cities and counties will assist in reaching and maintaining this goal. (Website)

Beverage Container Recycling Grant and Payment Programs

Public Resources Code, Division 12.1, Chapter 7, Section 14581(a)(4) authorizes the Department of Resources Recycling and Recovery (CalRecycle) to issue up to $1,500,000 annually in the form of grants for beverage container recycling programs. The availability of grant funding for communities will provide opportunities for CalRecycle to address recycling challenges, aid in increasing beverage container collection, and reduce beverage container litter in the waste stream. Eligible applicants for this grant program include California cities, counties, other local government entities, joint powers authorities, special districts, public colleges and universities, public K-12 school districts, nonprofit organizations and qualifying Indian tribes. (Website)

Beverage Container Redemption Pilot Project Grant Program

The Department of Resources Recycling and Recovery (CalRecycle) received an appropriation from the California Beverage Container Recycling Fund to administer the California Beverage Container Recycling and Litter Reduction Act (Assembly Bill 2020, Margolin, Statutes of 1986, Chapter 1290) (Public Resources Code [PRC] section 14571.9). SB 458 (Wiener Chapter 648 Statutes of 2017) authorized CalRecycle to approve up to five pilot projects proposed by cities and/or counties working in combination with private businesses to provide convenient beverage container redemption opportunities in both urban and rural areas.

AB 54 (Ting, Chapter 793, Statutes of 2019) amends PRC 14581 to allow for the expenditure of up to $5,000,000 to support the pilot projects. AB 54 also extends the deadline for CalRecycle to approve pilot project applications until January 1, 2022. (Website)

Community Composting for Green Spaces Grant

The Department of Resources Recycling and Recovery (CalRecycle) offers the Community Composting for Green Spaces Grant Program pursuant to Public Resources Code section 42999. The purpose of this competitive grant program is to increase the number of community groups operating small-scale composting programs in green spaces within disadvantaged and low-income communities, and to increase the capacity of those composting programs. Green spaces include, but are not limited to, community gardens, urban farms, and other public spaces where small-scale composting is appropriate. (Website)

GHG Reduction Grant and Loan Programs

The Greenhouse Gas Reduction Fund (GGRF) receives Cap-and-Trade auction proceeds appropriated by the Legislature and Governor for projects that support the goals of AB 32. Eligible investments identified in Statute include reducing greenhouse gas emissions through increased in-state diversion of municipal solid waste from disposal through waste reduction, diversion, and reuse. (Website)

Greenhouse Gas (GHG) Reduction Loan Program

The purpose of this loan program is to lower overall greenhouse gas emissions by expanding existing capacity or establishing new facilities in California to reduce the amount of California-generated green materials, food materials, and/or alternative daily cover being sent to landfills. Eligible applicants include government entities, regional or local sanitation agencies, waste agencies, and joint power authorities; private, for-profit entities; and nonprofit organizations (except private schools). Eligible Projects - Construction, renovation, or expansion of facilities to increase in-state infrastructure for: 1. The digestion or composting of organics into compost, soil amendments, biofuels, or bioenergy; or 2. The manufacturing of value-added finished products using California derived recycled content fiber, plastic, or glass. (Website)

Local Conservation Corps Grant Program

California Public Resources Code (PRC) section 14581.1 authorizes funding from the California Beverage Container Recycling Fund, the Electronic Waste Recovery and Recycling Account, the California Tire Recycling Management Fund, and the California Used Oil Recycling Fund for grants to the Local Conservation Corps (LCC). CalRecycle's grant program will help LCCs implement: beverage container recycling and litter abatement programs; programs relating to the collection and recovery of used oil and electronic waste; and the clean-up and abatement of waste tires. (Website)

Recycling Market Development Zones (RMDZ)-Revolving Loan Program

The Department of Resources Recycling and Recovery (CalRecycle) administers a Recycling Market Development Zone Loan Program to encourage California-based recycling businesses located within California to site new manufacturing facilities and expand existing operations. This program provides low-interest loans for the purchase of equipment and other relevant business costs. The intent of the Recycling Market Development Zone Loan Program is to help California manufacturers increase their processing capabilities and create additional markets for recycled-content products. (Website)

A.3.2. U.S. Environmental Protection Agency (EPA)

Supporting Anaerobic Digestion in Communities

US EPA has announced a competitive grant funding opportunity with an estimated $3 million available to increase anaerobic digester (AD) capacity in the United States. US EPA anticipates awarding 10 to 40 projects, with each individual project eligible to receive between $50,000-$300,000. Applications must achieve one or more of the following objectives: Support state, tribal, and/or local government programs that seek to use AD to increase their organic waste diversion rates; Demonstrate solutions and/or approaches for increasing AD utilization that can be replicated by other communities, governments, or other entities; and/or Establish new or expand existing partnerships that result in the development of AD capacity. (Website)

A.4. Water

A.4.1. California Department of Food and Agriculture (CDFA)

Water Efficiency and Enhancement Program

The State Water Efficiency and Enhancement Program (SWEEP) provides financial assistance in the form of grants to implement irrigation systems that reduce greenhouse gases and save water on California agricultural operations. Eligible system components include (among others) soil moisture monitoring, drip systems, switching to low pressure irrigation systems, pump retrofits, variable frequency drives and installation of renewable energy to reduce on-farm water use and energy. (Website)

A.4.2. California State Water Resources Control Board (WRCB)

Drinking Water State Revolving Fund

The Drinking Water State Revolving Fund (DWRSF) program assists public water systems in financing the cost of drinking water infrastructure projects needed to achieve or maintain compliance with Safe Drinking Water Act (SDWA) requirements. Established by an amendment to the federal Safe Drinking Water Act in 1996, the DWSRF provides low-interest loans, additional subsidy (principal forgiveness), and technical assistance to public water systems for infrastructure improvements to correct system deficiencies and improve drinking water quality for the health, safety, and welfare of all Californians. (Website)

Clean Water State Revolving Fund (CWSRF)

The Clean Water State Revolving Fund (CWSRF) program offers low cost financing for a wide variety of water quality projects. The program has significant financial assets, and is capable of financing projects from <$1 million to >$100 million. (Website)

Federal Clean Water Act 319(h)

Annual nonpoint source pollution control program that is focused on controlling activities that impair beneficial uses and on limiting pollutant effects caused by those activities. States must establish priority rankings for waters on lists of impaired waters and develop action plans, known as Total Maximum Daily Loads (TMDLs), to improve water quality. Project proposals that address TMDL implementation and those that address problems in impaired waters are favored in the selection process. There is also a focus on implementing management activities that lead to reduction and/or prevention of pollutants that threaten or impair surface and ground waters. (Website)

Interim Emergency Drinking Water

On March 27, 2015, Governor Brown approved a $1 billion emergency drought relief package to take effect immediately. As a result of the Governor's action, the State Water Resources Control Board (State Water Board) approved $19 million in funding from the Cleanup and Abatement Account to meet interim emergency drinking water needs for those communities with a contaminated water supply or that suffer drought related water outages or threatened emergencies. (Website)

A.5. Carbon Sequestration

A.5.1. California Coastal Conservancy

Climate Ready Program - Carbon Sequestration

Climate change has been driven by greenhouse gas (GHG) emissions into the atmosphere and the Conservancy is working to protect natural and working lands that remove and capture these gases in photosynthesis. Projects include acquisitions of coastal forests, wetland restoration, carbon banking, and carbon farming. (Website)

Climate Ready Program - Rangeland and Agricultural Adaptation

The Conservancy is helping rangeland and agricultural lands adapt to changing climates including grazing operations, grassland restoration, and water and soil conservation projects such as water catchments and storage design. (Website)

Climate Ready Program - Urban Greening

Global warming, drought, and runoff from extreme storms threaten the well-being of millions of urban residents. Conservancy funding is supporting inner-city projects that are creating shady retreats for residents, conserving rainwater, capturing stormwater pollution, and reducing air temperatures. (Website)

A.5.2. California Conservation Corps

Forest Health

The California Conservation Corps collaborates with public agencies and non-profit partners to improve forest health and conserve natural resources. Trained Corpsmembers conduct fuel reduction, reforestation, wetland restoration, urban forestry, and urban greening projects. Funding from the Greenhouse Gas Reduction Fund enables the California Conservation Corps to offer these services at an economical rate. With 19 locations statewide, the California Conservation Corps accepts requests for service on a rolling basis. (Website)

A.5.3. California Department of Fish and Wildlife

Wetlands Restoration

Grants for the restoration of wetland ecosystems for carbon storage and additional benefits. (Website)

A.5.4. California Department of Food and Agriculture (CDFA)

Healthy Soils Program Incentives Program

The HSP Incentives Program provides financial incentives to California growers and ranchers to implement conservation management practices that sequester carbon, reduce atmospheric greenhouse gases (GHGs), and improve soil health. GHGs benefits are estimated using quantification methodology and tools developed by California Air Resources Board (CARB), USDA-NRCS and CDFA and soil health improvement will be assessed by measuring soil organic matter content. (Website)

A.5.5. California Department of Forestry and Fire Protection (Cal FIRE)

Urban and Community Forestry Grant Program

The CAL FIRE Urban & Community Forestry Program works to optimize the benefits of trees and related vegetation through multiple objective projects as specified in the California Urban Forestry Act of 1978 (Public Resources Code 4799.06-4799.12). (Website)

Community Fire Planning and Preparedness

The California Department of Forestry and Fire Protection (CAL FIRE) will partner with the Governor's Office of Planning and Research, University of California, Cooperative Extension, and county governments in the wildland-urban interface to create a new fire outreach and extension program, provide funds and training for local planning, and support community fire prevention and preparedness, including the maintenance of evacuation routes. (Website)

A.5.6. California Natural Resources Agency (CNRA)

Environmental Enhancement and Mitigation Program (EEM)

The Environmental Enhancement and Mitigation Program (EEM) was established by the Legislature in 1989 to fund environmental enhancement and mitigation projects directly or indirectly related to transportation projects. EEM Program projects must fall within one of three categories: highway landscape and urban forestry; resource lands; or roadside recreation. Projects funded under this program must provide environmental enhancement and mitigation over and above that otherwise called for under the California Environmental Quality Act (CEQA). (Website)

Urban Greening Grant Program

The Urban Greening Program, funded by the GGRF, continues the legacy of these programs but with a specific focus of achieving greenhouse gas reductions. Consistent with AB 32, the Urban Greening Program will fund projects that reduce greenhouse gases by sequestering carbon, decreasing energy consumption and reducing vehicle miles traveled, while also transforming the built environment into places that are more sustainable, enjoyable, and effective in creating healthy and vibrant communities. These projects will establish and enhance parks and open space, using natural solutions to improving air and water quality and reducing energy consumption, and creating more walkable and bike-able trails. (Website)

A.5.7. California State Coastal Conservancy (SCC)

Proposition 1 Grants

Proposition 1 grants fund multi-benefit ecosystem and watershed protection and restoration projects. The Conservancy adopted its Proposition 1 Grant Program Guidelines in September 2016. Priority project types include: water sustainability improvements, anadromous fish habitat enhancement, wetland restoration and urban greening. For more details on the Coastal Conservancy's priorities, please review our Strategic Plan. (Website)

A.6. Other

CARB Clean Off-Road Equipment Voucher Incentive Project (CORE)

Analogous to the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP)5, CORE provides a first-come, first-served voucher process for fleets ready to purchase cleaner off-road equipment to receive funding to offset the higher cost of such equipment. Pursuant to AB 134 and the FY 2017-18 Funding Plan, CORE is currently only applicable to freight equipment powered exclusively by zero-emission technology. (Website)

CARB Funding Agricultural Replacement Measures for Emission Reductions (FARMER)

Local air districts offer incentives to replace old, high-polluting agricultural vehicles and equipment with cleaner options. (Website)

HCD Community Development Block Grant (CDBG)

CDBG Partners with rural cities and counties to improve the lives of their low- and moderate-income residents through the creation and expansion of community and economic development opportunities in support of livable communities. Eligible activities include housing, public improvements, community facilities, public services, planning and technical assistance, and improvements in Native American communities. (Website)

HCD Local Early Action Planning Grants Program (LEAP)

The Local Early Action Planning Grant Program (LEAP) provides one-time grant funding to cities and counties to update their planning documents and implement process improvements that will facilitate the acceleration of housing production and help local jurisdictions. prepare for their 6th cycle RHNA much like the SB2 Planning Grants. (Website)

DRP National Recreational Trails Program

The Recreational Trails Program (RTP) provides funds annually for recreational trails and trails-related projects. The RTP is administered at the federal level by the Federal Highway Administration (FHWA). It is administered at the state level by the California Department of Parks and Recreation (DPR) and the Department of Transportation (Caltrans) Active Transportation Program (ATP). Non-motorized DPR projects are administered by the Office of Grants and Local Services and motorized projects are administered by DPR's Off-Highway Motor Vehicle Recreation Division. (Website)

IBank Infrastructure State Revolving Fund (ISRF) Program

The Infrastructure State Revolving Fund (ISRF) Program provides financing to public agencies and non-profit corporations, sponsored by public agencies, for a wide variety of infrastructure and economic development projects (excluding housing). ISRF Program funding is available in amounts ranging from $50,000 to $25 million with loan terms for the useful life of the project up to a maximum of 30 years. (Website)

CNRA Youth Community Access Grant Program

The Youth Community Access Program will fund small capital projects, program projects, or a combination or capital and program projects that increase youth access to natural and cultural resources. (Website)

CSCDA California Lease Finance Program (CaLease)

The CSCDA California Lease Finance Program (CaLease) allows local agencies to finance equipment and real estate. The program has been established using a Master Lease Agreement with each respective local agency to provide for efficient subsequent purchases in the future. CaLease provides local agencies with access to multiple funding institutions who competitively bid on their project. This comprehensive lease management program allows local government the ability to bid and manage leases without dedicating significant staff time to the process. (Website)

SGC Proposition 84 Wildfire Resiliency and Recovery Planning Grants

The California Strategic Growth Council (SGC), the Governor’s Office of Planning and Research (OPR), and the California Department of Conservation (DOC)are pleased to open the application period for Proposition 84 Wildfire Resiliency and Recovery Planning Grants. A total of approximately $720,000 is available for up to 3-5 grants between $150,000 and $250,000. Eligible applicants for the Wildfire Resiliency and Recovery Planning Grants include local and regional governments (cities, counties, tribes, and metropolitan planning organizations) representing California areas affected by wildfires between 2017-2019. (Website)

WCB Climate Adaptation and Resiliency Program

The intent of this grant program is to fund projects that provide climate adaptation and resilience on California's natural and working lands. These projects must be consistent with the State's climate adaptation strategy (Safeguarding California Plan), contribute to the goals of AB 32, support California Wildlife Conservation Board's (WCB) Strategic Plan, and help fulfil WCB's Mission. In addition, projects will be consistent with other statewide plans and priorities, including the California Water Action Plan (CWAP) and California State Wildlife Action Plan 2015 Update (SWAP). Program funding is directed toward projects that: Protect and restore ecosystems on natural and working lands to provide climate change adaptation and resilience for wildlife; Assist natural and working lands managers in implementing practices that provide climate adaptation and resilience; Facilitate the reduction of GHG emissions; and Increase carbon sequestration in natural and working lands, and provide additional social, economic, and environmental benefits, or "co-benefits". (Website)

Habitat for Humanity Critical Home Repair Program

Since 2011, The Home Depot Foundation has generously funded critical repairs on the homes of veterans through Habitat for Humanity's Repair Corps program. This program is open to all military veterans, provided they have received an honorable or general discharge, and is not restricted to any specific veteran groups. While the primary focus of the program is on critical home repairs for veterans, the foundation has expressed their readiness to fund standard repairs on the homes of qualified veterans provided homes with critical needs take precedence. (Website)

Local Government Commission (LGC) CivicSpark Program

CivicSpark is a Governor's Initiative AmeriCorps program that is dedicated to building capacity for local governments to address emerging environmental and social equity resilience challenges such as climate change, water resource management, affordable housing, and mobility. CivicSpark is administered by the Local Government Commission in partnership with the Governor's Office of Planning and Research. (Website)

The Funders' Network for Smart Growth and Livable Communities Partners for Places Grant Program

Partners for Places aims to enhance local capacity to build equitable and sustainable communities in the United States and Canada. The fund does this by requiring local government and local foundation partnerships, and by pairing national and local philanthropic funding sources. These one-to-one matching awards support the planning and implementing of urban sustainability and green stormwater infrastructure projects. (Website)

The San Diego Foundation (TSDF) Climate Program Grants

Through the support of our donors and other local, regional and national funding partners, the Climate Program works to: Catalyze greater regional action to reduce polluting emissions, Facilitate and strengthen collaborative efforts to prepare for climate change, and Build public awareness and engage regional leaders around local solutions to climate change. (Website)

U.S. Economic Development Administration (EDA) Economic Development Administration Disaster Grants

The U.S. Economic Development Administration (EDA) is awarding $587 million in grants to eligible entities to address economic challenges in disaster-impacted areas. These grants will support disaster recovery activities in areas receiving a major disaster designation as a result of Hurricanes Harvey, Irma, Maria, and wildfires and other 2017 natural disasters. EDA disaster grants will be made by regional offices under the Economic Adjustment Assistance (EAA) program, which can support a wide range of construction and non-construction activities. Through this program, EDA can support disaster recovery planning strategies as well as the implementation of disaster recovery projects. Projects, among other things, must have a nexus to applicable disaster recovery and resilience efforts and be consistent with at least one of the DOC Disaster Recovery Investment Priorities. EDA plans to accept proposals on a rolling basis until all funds are obligated. (Website)

Ford Foundation Grants

The Ford Foundation makes grants that support the three I's: Institutions, Ideas, and Individuals. Having recently done away with their siloed grants program, the Ford Foundation accepts grant proposals that start in seven program areas, or entry points, as they say. The seven program areas: Civic Engagement and Government; Creativity and Free Expression; Future of Work(ers); Gender, Racial, and Ethnic Justice; Just Cities and Regions; Natural Resources and Climate Change; and Technology and Society. (Website)